



1                               BELLSOUTH TELECOMMUNICATIONS, INC.  
2                               DIRECT TESTIMONY OF WILEY (JERRY) G. LATHAM, JR.  
3                               BEFORE THE TENNESSEE REGULATORY AUTHORITY  
4                               DOCKET NO. 97-00309  
5                               APRIL 26, 2002  
6  
7   Q.     PLEASE STATE YOUR NAME AND YOUR JOB RESPONSIBILITIES.  
8  
9   A.     My name is Jerry Latham. I am the Project Manager for Unbundled Loops  
10         within the Interconnection Services unit of BellSouth Telecommunications,  
11         Inc. ("BellSouth"). I am responsible for Product Development and Product  
12         Management for unbundled loops (DS1 and below) and other unbundled  
13         network elements in BellSouth's nine-state territory.  
14  
15  Q.     WHAT IS THE PURPOSE OF YOUR TESTIMONY?  
16  
17  A.     The purpose of this testimony is to explain the nondiscriminatory  
18         processes and procedures through which Competitive Local Exchange  
19         Companies (CLECs) pre-order and order BellSouth's xDSL-capable  
20         (Digital Subscriber Line) loops. I will identify the attributes of BellSouth  
21         xDSL-capable loops and describe the process through which CLECs  
22         order and BellSouth provisions xDSL-capable loops. I will also  
23         demonstrate that these processes provide CLECs a meaningful  
24         opportunity to compete in the DSL market place.  
25

1 UNBUNDLED xDSL- AND IDSL- CAPABLE LOOPS

2

3 Q. WOULD YOU GIVE A GENERAL DESCRIPTION OF THE VARIOUS  
4 TYPES OF DSL LOOPS OFFERED BY BELLSOUTH?

5

6 A. The viability of DSL services is dependent, in part, on the end user's  
7 distance from his serving wire center (SWC), as well as the length, gauge,  
8 and status of the copper that serves that customer. To compensate for  
9 these parameters, BellSouth offers CLECs a variety of unbundled loops  
10 that may support DSL services from the CLEC to its end user customers.  
11 The loops are known as "ADSL- Capable loop," "HDSL- Capable loop,"  
12 "ISDN loop," "Universal Digital Channel (UDC)," "Unbundled Copper Loop  
13 (UCL), Short and Long" and "Unbundled Copper Loop – Non Designed"  
14 (UCL-ND).

15

16 Q. WHICH OF THE XDSL LOOPS OFFERED BY BELLSOUTH ARE THE  
17 MOST VERSATILE?

18

19 A. The most versatile of BellSouth's xDSL-capable loops are the Unbundled  
20 Copper Loop – ("UCL"), Short and Long and Unbundled Copper Loop -  
21 Non-Designed ("UCL-ND"). These loops were designed to meet CLEC  
22 requests for a basic copper loop.

23

24 Q. PLEASE DESCRIBE THE UCL LOOPS OFFERED BY BELLSOUTH.

25

1 A. Unbundled Copper Loop (UCL) - Short - The UCL-Short is a 2-wire or 4-  
2 wire loop that provides a non-loaded or “clean” copper pair to an end user  
3 using the Resistance Design (RD) industry standard. Under the RD  
4 standard, these loops may be up to 18,000 feet long and may have up to  
5 6,000 feet of bridged tap (“BT”) exclusive of the loop length. In other  
6 words, a UCL-Short loop can be 18,000 feet long and have up to 6,000  
7 feet of BT. BellSouth cannot guarantee that CLEC-provisioned DSL  
8 service will function properly over the UCL-Short loop, as the physical  
9 characteristics (length and BT) may be inconsistent with the maximum  
10 distance for many DSL services and equipment. BellSouth will, however,  
11 verify that these loops have no more than 1300 ohms of resistance,  
12 electrical continuity, and balance relative to the tip-and-ring, and will  
13 maintain them to these requirements.  
14  
15 BellSouth developed the UCL-Short in direct response to CLEC requests  
16 for an unbundled loop with the same specifications that BellSouth uses for  
17 its own wholesale ADSL service. This loop meets those criteria. The  
18 UCL-Short has been available to CLECs since the second quarter 2000.  
19  
20 Unbundled Copper Loop (UCL) - Long - The UCL-Long is a 2-wire or 4-  
21 wire copper loop that is longer than 18,000 feet. This loop was developed  
22 in response to CLEC requests, as well as the UNE Remand  
23 Order’s directive that ILECs should provide xDSL-capable loops wherever  
24 requested by the CLEC. Normal telephony standards dictate that all  
25 copper loops exceeding 18,000 feet in length must be loaded to properly

1 service dial-tone or POTS type customers. Therefore, in almost all cases,  
2 a CLEC seeking to provide functioning DSL service will need, in addition  
3 to ordering the UCL- Long, to place an order for "loop conditioning" -  
4 BellSouth's Unbundled Loop Modifications (ULM) product - to remove the  
5 load coils and/or BT from these loops in order to transform them into "dry"  
6 or "clean" copper loops. The CLEC would pay the ULM costs separate  
7 from the cost of the loop itself.

8

9 By the end of January 2002, BellSouth had received orders for and  
10 deployed 3,331 UCL Short and Long loops region-wide and 593 in  
11 Tennessee.

12

13 Q. HAS BELL SOUTH DEVELOPED ANY OTHER COPPER BASED  
14 LOOPS?

15

16 A. Yes. At the request of CLECs, BellSouth has developed another xDSL-  
17 capable loop. This loop is known as the Unbundled Copper Loop – Non  
18 Designed (UCL-ND). It is a non-loaded copper loop that generally has  
19 1300 ohms or less of resistance and does not have a specific length  
20 limitation. The length is driven by many factors but is generally less than  
21 18,000 feet long. This loop does not go through the  
22 "design" process. Therefore, it does not have a remote access test  
23 point and does not come standard with a Design Layout Record (DLR).  
24 This loop was developed to respond to the CLECs' desire for an xDSL  
25 loop with a lower non-recurring cost. These loops are not intended to

1 support any particular service and may be utilized by the CLEC to provide  
2 a wide-range of telecommunications services so long as those services  
3 do not adversely affect BellSouth's network.

4

5 By the end of January 2002, BellSouth had received orders for and  
6 deployed 215 UCL-ND loops region-wide, of which 42 are in  
7 Tennessee.

8

9 Q. WHAT OTHER TYPES OF XDSL LOOPS ARE OFFERED BY  
10 BELL SOUTH?

11

12 A. In addition to the UCL-Short and Long, BellSouth offers CLECs four other  
13 xDSL-capable loops: ADSL-capable loop; HDSL-capable loop; ISDN-  
14 capable loop; and Universal Digital Channel ("UDC") loop.

15

16 Q. CAN YOU BRIEFLY DESCRIBE THE HISTORY OF THE  
17 DEVELOPMENT OF THESE OTHER TYPES OF LOOPS?

18

19 A. Yes. BellSouth developed two of these xDSL-Capable loop offerings, the  
20 HDSL-capable loop and the ADSL-capable loop, in direct response  
21 to the FCC's Local Competition Order. That Order defined loops to  
22 include "two-wire and four-wire analog voice-grade loops, and two-wire  
23 and four-wire loops that are conditioned to transmit the digital signals  
24 needed to provide services such as ADSL, HDSL and DS1-level signals."

25

1 Q. PLEASE DESCRIBE THE HDSL AND ADSL LOOPS.

2

3 A. HDSL-Capable Loop – For technological reasons, high-speed DSL  
4 services work best on short, clean-copper loops. BellSouth's HDSL-  
5 capable loop meets these requirements. BellSouth screens HDSL-  
6 capable loops to ensure that they meet stringent industry standards for  
7 Carrier Serving Area (CSA) transmission specifications to better support  
8 DSL services. Under these strict technical standards, the end user must  
9 be served by non-loaded copper and the loop typically cannot be more  
10 than 12,000 feet long. If 26-gauge copper is used, the limit is 9,000 feet  
11 or less. HDSL-Capable loops may have up to 2,500 ft of BT, and 850  
12 ohms or less of resistance.

13

14 The HDSL-capable loop has been available to CLECs since fourth  
15 quarter 1996. By the end of January 2002, BellSouth had deployed 557  
16 HDSL-capable loops region-wide, of which 61 are in Tennessee.

17

18 ADSL-Capable Loops – Originally, the ADSL loop offering was set to  
19 the same CSA criteria as the HDSL-capable loop. In response to CLEC  
20 requests, however, and with the establishment of industry guidelines for  
21 loop types that support ADSL service, BellSouth modified the design  
22 criteria for the ADSL-capable loop in the first quarter 2000 to the Revised  
23 Resistance Design (RRD) standards. RRD standards require a non-  
24 loaded copper loop, up to 18,000 feet in length, with up to 6,000 ft of BT  
25 inclusive of loop length, and 1300 ohms or resistance. "Inclusive of loop

1 length” means that for every foot of BT, the loop length is reduced by an  
2 equal amount. Therefore, a RRD loop that has 4,000 ft of BT could be no  
3 longer than 14,000 ft.

4

5 This loop has been available to CLECs since fourth quarter 1996. By the  
6 end of January 2002, BellSouth had provided CLECs 16,613 ADSL-  
7 capable loops region-wide, of which 1,533 are in Tennessee.

8

9 Q. PLEASE DESCRIBE HOW BELL SOUTH CAME TO DEVELOP THE  
10 ISDN-CAPABLE AND UDC LOOPS.

11

12 A. As with the ADSL and HDSL loops mentioned above, the ISDN-capable  
13 loop was developed in response to the release of the Local Competition  
14 Order. However, as described below, the ISDN loop is not always  
15 suitable for Integrated Digital Subscriber Line (IDSL) services. Therefore,  
16 the CLECs requested that BellSouth provide a loop that could support the  
17 hybrid form of DSL service known as IDSL. In  
18 response to these requests, BellSouth developed the UDC loop.

19

20 Q. PLEASE DESCRIBE THE ISDN-CAPABLE AND UDC LOOPS.

21

22 A. ISDN-Capable Loops – While not intended for xDSL use, ISDN-capable  
23 loops may be used to support the DSL service known as IDSL. BellSouth  
24 provisions its ISDN-capable loops according to applicable industry  
25 standards (i.e., ANSI), which means they may be provisioned over copper



1 or via a Digital Loop Carrier (DLC) system. These loops are free of load  
2 coils, but are not referred to as "clean copper loops" because they may be  
3 provisioned via DLC systems that are completely compatible with ISDN  
4 service, but not most xDSL services.

5

6 Q. PLEASE DESCRIBE UDC LOOPS.

7

8 A. UDC Loops - As recognized by the FCC in its FCC-00-238 Order, not all  
9 ISDN loops are completely compatible with IDSL service. Because of  
10 this, BellSouth developed the UDC loop, which was introduced on May 31,  
11 2000. This loop is identical to the ISDN loop, but is provisioned in a  
12 manner that supports "data-only" ISDN, which will better meet the needs of  
13 CLECs who want to deploy IDSL. This loop has been available to CLECs  
14 since June 1, 2000. By the end of January 2002, BellSouth had provided  
15 CLECs 14,480 UDC loops region-wide, of which 910 are in Tennessee.

16

17 Q. WHY DOES BELL SOUTH OFFER SO MANY TYPES OF XDSL  
18 LOOPS?

19

20 A. To understand why BellSouth offers a variety of xDSL loops, one need  
21 only review the history of xDSL-capable loops. BellSouth has developed  
22 this variety of xDSL loop types in direct response to CLEC requests as  
23 well as the evolving scope of its obligations under applicable FCC rules  
24 and regulations. As described above, BellSouth first developed the  
25 HDSL and ADSL-capable loops to comply with the obligations stated in

1 the Local Competition Order. Once developed, these loops were included  
2 in CLEC Interconnection Agreements. In the months following the release  
3 of the Local Competition Order, BellSouth developed several additional  
4 xDSL loop offerings at the request of CLECs operating within BellSouth's  
5 region. Again, BellSouth's obligation to provision these loops was  
6 memorialized in various Interconnection Agreements. These continuing  
7 contractual obligations for all of the loop types make it impossible for  
8 BellSouth to discontinue any xDSL loop; rather, as BellSouth develops  
9 new product offerings, BellSouth simply adds to the list of options from  
10 which the CLEC can choose.

11

12 The benefit to the CLECs of this historical growth of offerings is that  
13 CLECs have a variety of loop types from which they can choose to best  
14 meet their technical needs in providing telecommunications services to  
15 its customers for the least cost. The fact that BellSouth offers different  
16 loop types, however, does not in any way restrict a CLEC's ability to offer  
17 any particular type of xDSL service it may desire over any loop in  
18 BellSouth's network. Indeed, the only restrictions that limit a CLEC's  
19 choice of DSL technologies are those established by industry standards  
20 bodies to ensure the integrity of voice service.

21

22 Q. HAS BELL SOUTH ENTERED INTO INTERCONNECTION  
23 AGREEMENTS WITH FACILITIES-BASED CLECS THROUGH WHICH  
24 IT IS PROVIDING THESE XDSL CAPABLE LOOPS?

25

1 A. Yes. BellSouth has entered into Interconnection Agreements with  
2 facilities-based carriers in Tennessee to provide each of the loops  
3 described above. (See e.g. Interconnection Agreement between  
4 BellSouth and Covad Communications Company, Inc. filed with the  
5 Tennessee Regulatory Authority on February 12, 2002, pending approval  
6 and Interconnection Agreement between BellSouth and NOW  
7 Communications approved by the Authority on April 8, 2002.)  
8

9 Q. WHERE CAN YOU FIND MORE INFORMATION ON THESE TYPES OF  
10 LOOPS?  
11

12 A. Additional information about all of BellSouth's xDSL loops can be viewed  
13 in Exhibits 1 through 7 to my testimony and on BellSouth's internet web  
14 site at: "[www.interconnection.bellsouth.com/products/unec.html](http://www.interconnection.bellsouth.com/products/unec.html)".  
15

16 Q. CAN YOU SUMMARIZE THE TYPES OF AVAILABLE LOOPS AND  
17 THEIR CHARACTERISTICS?  
18

19 A. Yes. The HDSL capable loop (using CSA standards) will provide clean  
20 copper pairs to customers up to 12,000 feet from the Central Office (CO).  
21  
22 The ADSL capable loop (using RRD standards) and the UCL-Short (using  
23 RD standards) will provide clean copper pairs to customers up to 18,000  
24 feet from the CO (using different criteria for BT).  
25

The UCL-Long, in conjunction with the ULM conditioning product, allows CLECs to serve customers beyond 18,000 feet from the CO using clean copper pairs.

The ISDN and UDC capable loops will give the CLEC the option of providing IDSL service to any customer even if that customer does not have clean copper pairs available at their address.

<b>LOOP TYPE</b>	<b>UDL – HDSL</b>	<b>UDL – ADSL</b>	<b>UCL Short</b>	<b>UCL Long</b>	<b>UCL - ND</b>	<b>ISDN/UDC</b>
<b>Max loop length</b>	12 kft	18 kft	18 kft	Unlimited	Undefined (generally 18kft)	18 kft (Copper) No limit (DLC)
<b>Max total bridge tap</b>	2.5 kft inclusive	6 kft inclusive	6 kft exclusive	12 kft exclusive	6 kft exclusive	6 kft inclusive
<b>Longest single Bridge tap</b>	2.0 kft	6 kft	6 kft	6 kft	6 kft	6 kft
<b>Max Resistance in Ohms</b>	850	1300	1300	2800	1300	1300 (copper)
<b>Max Loss (per 73600)</b>	35db@100KHz	42db@40KHz	46db@40KHz	N/A	Varies (Similar to UCL-Short)	42db@40KHz
<b>Service Inquiry Required</b>	Yes	Yes	Yes	Yes	No	No
<b>Number of wires</b>	2 or 4 wire	2 wire	2 or 4 wire	2 or 4 wire	2 wire	2 wire

The chart above shows the technical specifications for each of BellSouth's xDSL-capable loops. BellSouth developed each of these loops, to the extent possible, in accordance with industry standard physical characteristics and specifications. Application of these standards allows BellSouth to provision, maintain and repair these loops efficiently while retaining network integrity for all of BellSouth's services, including non-

1 DSL services. If, however, a CLEC wants other, non-standard loop types,  
2 BellSouth will work cooperatively with the CLEC to develop these through  
3 our Interconnection Agreement negotiation sessions (as we have done for  
4 the UCL-Short) or through the Bona Fide Request (BFR) process.

5

6 PRE-ORDERING / ORDERING PROVISIONING

7

8 Q. WOULD YOU PLEASE DEFINE AND DESCRIBE LOOP MAKE-UP  
9 INFORMATION?

10

11 A. "Loop make-up information" ("LMU") refers to the detailed information  
12 regarding a given loop's physical characteristics that an interested CLEC  
13 can use to determine the feasibility of provisioning xDSL service to a  
14 particular end user customer. This information includes: loop length, wire  
15 gauge, loop medium (copper or fiber), and information regarding any  
16 bridged tap, load coil, or repeaters present on the loop. Through the  
17 manual processes discussed in this testimony, BellSouth provides  
18 CLECs access to all of the loop makeup information available to  
19 BellSouth personnel.

20

21 BellSouth has developed a loop qualification process that enables a  
22 CLEC to access loop make-up information via manual or electronic  
23 interfaces. Manual loop qualification is available when BellSouth's  
24 electronic records do not have LMU about a particular loop. With this  
25 information in hand, CLECs can determine whether and what type of

1 xDSL service can be provisioned over the loop facilities that serve their  
2 prospective customers. Electronic access to loop make-up information  
3 will be addressed in the context of checklist Item 2 in Phase II of the  
4 Authority's OSS docket. The process for providing loop make-up  
5 information on a manual basis is described below.

6

7 Q. WHAT IS THE PROCESS FOR OBTAINING LOOP MAKE-UP  
8 INFORMATION MANUALLY?

9

10 A. The manual loop make-up process is as follows: the CLEC initiates the  
11 manual loop make-up process by submitting a request for loop make-up  
12 information either to its account team (AT) or the Complex Resale Support  
13 Group (CRSG). A copy of the form provided to CLECs for their use in  
14 ordering is attached as Exhibit 5 to my Testimony. The CRSG/AT  
15 forwards the request to the appropriate Service Advocacy Center (SAC)  
16 depending upon the end user's address. The SAC will physically look  
17 through BellSouth's Central Office (CO) records to gather the loop make-  
18 up information. The SAC sends the loop make-up information, which  
19 includes information such as the length and gauge of cable, number of  
20 load coils (LC), and the length and gauge of BT, back to the CRSG/AT.  
21 The CRSG/AT sends the loop make-up information to the CLEC, who is  
22 then in a position to determine whether, and what type of, xDSL services it  
23 can offer over the available facilities.

24

25 If the CLEC makes the decision to provide service using the facility but

1 needs to have the loop conditioned, it can use BellSouth's Unbundled  
2 Loop Modification (ULM) process in order to modify any existing loop to  
3 be compatible with each CLEC's particular hardware requirements. The  
4 ULM process conditions the loop by the removal of any devices that may  
5 diminish the capability of the loop to deliver high-speed switched wire line  
6 capability, including xDSL service. Such devices include, but are not  
7 limited to load coils, bridged taps, low pass filters, and range extenders.  
8 The ULM offering provides for removal of  
9 equipment on loops equal to or less than 18,000 feet, as well as loops that  
10 are longer than 18,000 feet. These devices are placed on copper loops to  
11 enhance the voice characteristics when provided on long copper facilities  
12 or to otherwise comply with standards for other services such as PBX  
13 trunks. The CLEC may select the level of line conditioning it desires and  
14 will be required to pay only for the level of conditioning it selects. BellSouth  
15 will provide line conditioning on a CLEC request for unbundled loops,  
16 whether or not BellSouth offers advanced services to the end-user  
17 customer on that loop. The Tennessee Regulatory Authority adopted, on  
18 an interim basis, the rates negotiated by BellSouth and Covad for the  
19 ULM offering.

20 Q. PLEASE DESCRIBE THE MANUAL AND ELECTRONIC ORDERING  
21 PROCESSES FOR XDSL CAPABLE LOOPS.

22

23 The manual ordering process for xDSL and IDSL capable loops is virtually  
24 identical to the manual ordering processes and procedures for other loop  
25 types. This process will be described in the context of checklist Item 2 in

1 Phase II of the OSS docket.

2

3 BellSouth's electronic pre-ordering and ordering interfaces have been  
4 enhanced to provide electronic access to loop makeup information and  
5 electronic ordering of ADSL-capable loops, HDSL-capable loops, and  
6 UCLs. BellSouth will provide further information on this process in the  
7 context of checklist Item 2 in Phase II of the OSS docket.

8

9 PROVISIONING AND TESTING

10

11 Q. WHAT INTERVALS HAVE BEEN ESTABLISHED FOR THE  
12 PROVISIONING OF XDSL CAPABLE LOOPS?

13

14 A. BellSouth has established intervals for the provisioning of DSL loops and  
15 supporting services. The provisioning interval for the xDSL loop is 5  
16 business days. The interval for manual Loop-Make Up is 3 business  
17 days.

18

19 Due to the widely varied configurations for loop deployment, BellSouth has  
20 agreed to establish a target interval of 14 business days for provisioning  
21 loops that require conditioning.

22

23 Q. WHAT TYPES OF TESTING ARE PERFORMED ON UNE LOOPS,  
24 INCLUDING XDSL CAPABLE LOOPS?

25



1 A. During the installation of UNE loops, BellSouth performs tests necessary  
2 to ensure that the loop being provisioned meets the specifications for the  
3 loop type ordered by the CLEC. In addition, BellSouth has agreed to  
4 provide Additional Cooperative Acceptance Testing. This cooperative  
5 testing provides the CLECs with a means to test loops beyond those tests  
6 that BellSouth normally performs during the provisioning process.

7

8 In addition, through the negotiation of Interconnection Agreements,  
9 BellSouth and the CLECs have established joint provisioning procedures  
10 for xDSL loops. See Interconnection Agreement between BellSouth and  
11 Covad, filed with the Tennessee Regulatory Authority  
12 February 12, 2002, pending approval. These joint procedures allow  
13 BellSouth and the CLEC to be actively involved in the testing and  
14 provisioning of UNE loops throughout the provisioning process. This  
15 helps ensure that the circuit works properly for the CLEC's intended  
16 service from the first day that the circuit is activated to the end user.

17

18 So far as it is technically feasible, BellSouth will perform a broad range of  
19 tests on conditioned loops for all of the line's features, functions and  
20 capabilities, and does not limit its testing to voice-grade tests.

21

22 SPECTRUM MANAGEMENT

23

24 Q. PLEASE DESCRIBE SPECTRUM MANAGEMENT.

25

1 A. CLECs are free to provide any telecommunications service they choose  
2 on any unbundled loop, as long as that service does not negatively impact  
3 other services and providers. BellSouth's TR73600 document and other  
4 industry standards for Power Spectral Density masks, once established,  
5 will help control these negative impacts and allow multiple carriers'  
6 services to co-exist harmoniously. BellSouth provides CLECs  
7 access to TR73600 via BellSouth's internet website. It should be noted,  
8 however, that BellSouth cannot be expected to guarantee a CLEC's  
9 service will work on loops not intended for a particular service. For  
10 example, a CLEC may order a voice-grade loop and attempt to put some  
11 type of high-speed data service on that loop. If that service works (without  
12 disrupting other services), then all is well. If not, BellSouth can only  
13 maintain and repair the circuit as a voice-grade line (i.e., the type of loop  
14 ordered). Of course, the CLEC would have the option to replace the voice  
15 grade line with an xDSL-capable loop, and could use the ULM product to  
16 condition the loop to support the CLEC's chosen service.  
17  
18 Currently, efforts are underway at the national level to adopt standards that  
19 minimize the potential for interference when loops adjacent to one another  
20 in a binder group are used to provide divergent technologies (e.g., ADSL  
21 and HDSL). National standards bodies are working towards establishing  
22 industry consensus on how best to accommodate xDSL-based services  
23 on a wire line network originally designed to carry voice transmissions.  
24 BellSouth strongly supports this effort and is involved in the national  
25 standards bodies working on these issues.

1

2 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

3

4 A. Yes.

5

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25

AFFIDAVIT

STATE OF: Alabama  
COUNTY OF: Jefferson

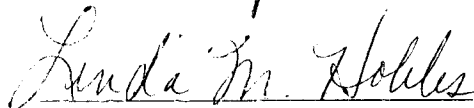
BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Wiley (Jerry) G. Latham – Product Manager- Unbundled Loops, BellSouth Telecommunications Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 97-00309 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 18 pages and 7 exhibit(s).



Wiley (Jerry) G. Latham

Sworn to and subscribed  
before me on April 26<sup>th</sup>, 2002

  
NOTARY PUBLIC

Notary Public, Gwinnett County, Georgia  
My Commission Expires March 17, 2003



**Exhibit No. WGL - 1**

## BellSouth Unbundled Digital Loop

**Service Description** The Unbundled Digital Loop (UDL) is a dedicated digital transmission facility from BellSouth's main distribution frame (MDF) to a customer's premises. This facility will allow the end user to send and receive traffic that support technologies such as ISDN; Enhanced Electronic (EE) capabilities such as HDSL/ADSL; and high capacity services such as DS-1 when the loops are connected to a CLEC's packet/circuit switch. The CLEC must provide electronics and switching capabilities to support a particular service type. This facility will include a Network Interface Device (NID) at the customer's location for the purpose of connecting the loop to the customer's inside wire.

In cases where an existing BellSouth end user's loop is provisioned via an Integrated Digital Loop Carrier (IDLC) system, BellSouth will roll the circuit off of the IDLC onto an alternate facility such as parallel copper, a universal DLC, etc. BellSouth will notify the CLEC if no alternate facility exists. If the CLEC still requires a UDL, BellSouth will utilize its existing Special Construction process to install the facilities needed to provide UDLs to the CLEC.

**Characteristics** The UDL is a designed circuit, and BellSouth will provide a Design Layout Record (DLR). UDLs will be provisioned with a test point.

BellSouth cannot perform any Mechanized Loop Test (MLT) type (switch-based) testing during the installation of the circuit. BellSouth will only perform installation testing (other than switch-based) that is typically performed on the loop portion of BellSouth's circuit/packet switched services.

Order Coordination will be provided. The OC feature will allow for coordination of the UDL installation with the disconnect of an existing end-user's service and/or number portability service. OC-Time Specific (OC-TS) is also offered as a chargeable option. With OC-TS BellSouth and the CLEC will mutually agree on the appropriate conversion time, and BellSouth will perform the work within the negotiated interval.

**Applications** Following are UDL loop types and services that the CLEC may provide depending upon the CLEC's equipment:

Loop Type	CLEC provided service:
2 Wire UDL – ISDN capable loop	Basic Rate ISDN
2 Wire UDL - ADSL capable loop	ADSL Service (no bit rate guarantee)
2 or 4 Wire UDL - HDSL capable loop	HDSL technology (no bit rate guarantee)
4 Wire – UDL - DS1/ISDN	DS1 transmission or Primary Rate ISDN
4 Wire DS0	56/64 Kbps and sub-rate DS0

CLEC-1 may utilize the UDL to provide any telecommunication service it wishes. However, BellSouth will only provision, maintain and repair the loops to the standards that are consistent with the type of loop ordered. For example, if the CLEC orders an ISDN-capable loop but wants to use the loop for a service other than ISDN, BellSouth will only support that the loop is capable of providing ISDN service.

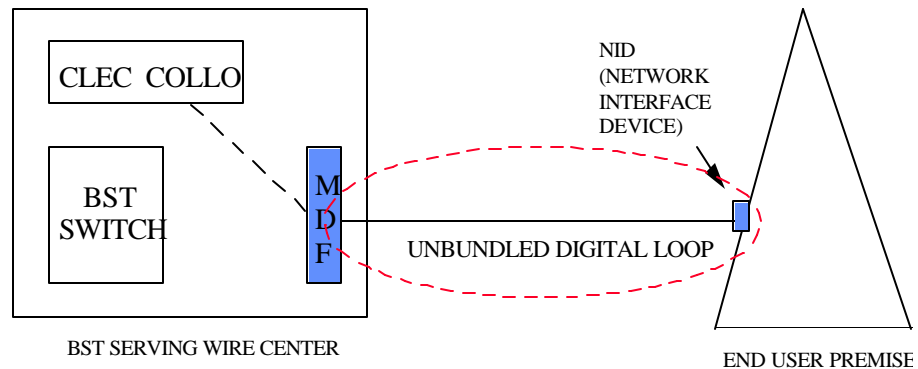
## BellSouth Unbundled Digital Loop

### Service Configurations

It is expected that the UDLs will primarily be terminated at the BellSouth central office in one of two ways:

1. UDLs will be delivered to the CLEC at their collocation space via a cross-connect. This cross-connect element will be provisioned out of the Collocation offering. Once this connect is made, the CLEC will provide transport to take the circuit back to their switch.
2. UDLs will be terminated onto a multiplexing/concentrating device (e.g., TR008, SONET multiplexer), and the multiplexed/concentrated circuit would then be delivered to the CLEC's collocation space in a similar manner as listed in #1 above.

### Typical Configuration:



### Technical Specifications:

For complete technical specifications for UDLs, refer to [TR73600](#).

User will click  
here to link to  
this

### Availability & Pricing

UDLs are available in all states where facilities exist and where the CLEC has an Interconnection Agreement with BellSouth. Prices will vary from state to state and are specified in each CLEC's Interconnection Agreement.

### Ordering:

The Local Carrier Service Center (LCSC) will receive and process UDL orders. CLECs will use a mechanized order entry system where made available by BellSouth.

Where facilities are available and upon issuance of a service order, the targeted installation interval is 5-7 business days for one to five loops and ten business days for six to ten loops. For an order of fourteen or more UDLs, the installation will be handled on a project basis and the BellSouth project manager for that order will set the intervals.

Expedite charges will apply for expedite requests for intervals of less than five days.



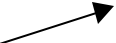
## BellSouth Unbundled Digital Loop

If the CLEC modifies an order after the Firm Order Confirmation (FOC) has been sent, any costs incurred by BellSouth to modify the order will be charged to the CLEC.

If an order is canceled by the CLEC, any costs incurred by BellSouth in conjunction with provisioning that order will be recovered from the CLEC.

The CLEC will use the Service Inquiry (SI) process for BellSouth to determine the availability of ADSL and/or HDSL qualified loops. The SI will be requested through the CLEC's BellSouth account team. The interval for the SI process is in addition to the target installation interval.


User will click here to link to document



Refer to the "Local Service Request Ordering Process" section of the [BellSouth Ordering Guide for CLECs](#) for additional ordering information.

UDL ordering requires unique network-channel and network-channel-interface (NC/NCI) codes. CLEC must provide the NC/NCI codes on the LSR. For information NC/NCI codes, refer to [TR73600](#).

User will click here to link to this web site



### **Maintenance & Repair**

Maintenance and repair is provided through the UNE Center. The target repair interval for a UDL will closely approximate the intervals for the BellSouth services that can be supported by a UDL.

If an outside dispatch is required by the CLEC, BellSouth will charge the CLEC for the time and material required to verify the UDL working status if there is no repair problem.

BellSouth will perform repair functions during normal working hours. If the CLEC requests that BellSouth repair a trouble after normal working hours, BellSouth will bill the CLEC the appropriate overtime charges for the technician to perform the work.

### **Contract Specific Provisions:**

The information contained herein applies to the UDL general offering. The general offering is in accordance with BellSouth policies, procedures and regulatory obligations as well as the standard BellSouth Interconnection Agreement.

The general offering does not address specific contract issues within a CLEC's Interconnection Agreement that may be different from the general offering. Where specific contract issues differ from the information provided here, the contract provisions will prevail for the term of the specific CLEC Interconnection Agreement. Otherwise, the general offering provisions will apply.



**Exhibit No. WGL - 2**

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**BellSouth Unbundled ADSL/HDSL Compatible Loops**

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***Unbundled Asymmetrical Digital Subscriber Line (ADSL) Compatible Loop***

***and***

***Unbundled High-Bit-Rate Digital Subscriber Line (HDSL) Compatible Loop***

***CLEC  
Information Package***

*(Version 7)*

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

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## **BellSouth Unbundled ADSL/HDSL Compatible Loops**

### **Introduction & Scope**

This Product Information Package is intended to provide to CLECs a product description and general ordering information specific to the UNE described herein. Detailed ordering guidelines are provided in documents located on the BellSouth Interconnection Web site.

The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the CLEC Notification Process.

Please contact your BellSouth Account Manager, if you have any questions about the information contained herein.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Revisions

#### Version 7

- 1) Page 1 – ‘Version 7’ replaces ‘Version 6’.
- 2) Footnote on each page – date changed from ‘06/29/01’ to ‘11/09/01’ and ‘Version 6’ changed to ‘Version 7’.
- 3) **Service Order Requirements** section, **Local Service Request (LSR) form** sub-section – for 2 Wire HDSL added an optional ‘NCI at CLEC’ code of 02QB9.004 and an optional ‘SEC NCI at End User’ code of 02DU9.004.
- 4) **Rate Elements & USOCs** section, **Other Non-Recurring Charges** section – removed “and electronic ordering is available” from ‘Manual Service Order’ line. Added “Electronic Service Order -- applies if order is submitted electronically”.
- 5) **Intervals** section – deleted the last sentence.

#### Version 6

- 1) Page 1 – ‘Version 6’ replaces ‘Version 5’.
- 2) Footnote on each page – date changed from ‘3/30/01’ to ‘6/29/01’ and ‘Version 5’ changed to ‘Version 6’.
- 3) **Loop Order with prior LMU & FRN and with Unbundled Loop Modification (ULM)** section – changed steps 8, 9, and 10 to reflect internal process changes.
- 4) **Loop Order without prior LMU & FRN** section – changed steps 9, 10, and 11 to reflect internal process changes.
- 5) **Service Order Requirements** section, **LSR & SI Transmittal** sub-section – added information regarding CRSG/Account Team acknowledgement of SI receipt.

#### Version 5

- 1) Page 1 – ‘Version 5’ replaces ‘Version 4’.
- 2) **Footnote** on each page – date changed from ‘10/13/00’ to ‘3/30/01’ and ‘Version 4’ changed to ‘Version 5’.
- 3) **Ordering & Provisioning** section, 1<sup>st</sup> paragraph;
  - Deleted old 1<sup>st</sup> paragraph and replaced with new 1<sup>st</sup> paragraph to reflect electronic ordering references.
  - Deleted old 2<sup>nd</sup> paragraph and replaced with new 2<sup>nd</sup> paragraph to clarify the manual ordering scenarios ‘with prior’ and ‘without prior’ LMU.
  - Deleted 2<sup>nd</sup> sentence of third paragraph. LMU parameters should be referenced in the LMU product package.
- 4) **Ordering & Provisioning (continued)** section – added ‘**Electronic Ordering**’ sub-section.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Revisions (continued)

- 5) **Service Order Requirements** section; 'Local Service Request (LSR) form' sub-section;
  - Replaced 'BellSouth Ordering Guide for CLECs (Local Service Ordering Guidelines, version 2 (LSOGv2))' with '**Local Exchange Ordering-Implementation Guide**'.
  - Replaced 'Local Ordering Guidelines, version 4 (LSOGv4)' with '**BellSouth Business Rules for Local Ordering**'
  - Within the table under the '**Information Required**' column, added "when placing order manually" after 'FRN'.
  - Within the table, added 'RESID' field under the '**LSR Field**' column and; "ADSL or HDSL loop reservation ID (required when placing electronic order)" under the '**Information Required**' column.
- 6) **Service Order Requirements** section – '**Service Inquiry (SI) form**' sub-section;
  - Replaced last sentence with "Refer to the "**Service Inquiry**" and "**Instructions for Preparing Service Inquiry**" for the SI".
  - User will click on "**Service Inquiry**" to download the SI and instructions.
- 7) **Maintenance & Repair Procedures** section – Replaced the 'Unbundled Network Element (UNE) Center' with 'Customer Wholesale Interconnection Network Services (CWINS) Center'.
- 8) Deleted **Service Inquiry and Instructions for Preparing Service Inquiry** sections from the CLEC Information Package and re-established as a 'download' document from '**Service Inquiry (SI) form**' sub-section.
- 9) **Acronyms** section – added 'RESID' acronym and 'Reservation Identification'.

### Version 4

- 1) Page 1 – "Version 4" replaces "Version 3".
- 2) **Footnote** on each page – date changed from "8/25/00" to "10/13/00" and "Version 3" changed to "Version 4".
- 3) **Service Order Requirements** section – **LSR form sub-section**:
  - Added "Project" under the **LSR Field**
  - Under the "**Information Required**" column added "If Unbundled Loop Modification is ordered, populate with the following:
    - ULMLC – for Load Coil removal
    - ULMBT – for Bridge Tap removal
    - ULMBTLC – for Load Coil and Bridge Tap removal"



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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Revisions (continued)

#### Version 3

- 1) Page 1 – “Version 3” replaces “Version 2”.
- 2) **Footnote** on each page – date changed from 7/25/00 to 8/25/00 and Version 2 changed to Version 3.
- 3) **Service Capabilities** section, first paragraph, second sentence – replaced “DLSAM” with “DSLAM”.
- 4) **Technical Requirements** section, **ADSL compatible loop** sub-section, first paragraph, second sentence – reference to Committee T1 Technical Report No. 28 changed to Bellcore SR-TSV-002275.
- 5) **Network Configuration** section – replaced “BST” with “BellSouth”.
- 6) **Service Order Requirements** section:
  - **LSR form sub-section** – first paragraph, deleted Ordering and Billing Forum (OBF) guidelines reference and replace with **BellSouth Ordering Guide for CLECs** (Local Service Ordering Guidelines, version 2 (LSOGv2)) or the **BellSouth Business Rules for Local Ordering** (Local Service Ordering Guidelines, version 4 (LSOGv4)). –
  - **LSR form sub-section** – first paragraph, deleted last sentence
  - **Service Inquiry (SI) form sub-section** – added first sentence – “A Service Inquiry is required, dependent on the ordering scenarios described in the **Ordering & Provisioning** section, for ordering an ADSL/HDSL compatible loop.”
- 7) **Service Inquiry Form** – added “click here to download” under the heading **Service Inquiry Form** which allows the CLEC to download the SI to a usable format for CLEC preparation.
- 8) Added an **Acronyms** section.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Revisions (continued)

#### Version 2

- 1) The version 1 **Ordering and Provisioning** section was replaced with a new **Ordering and Provisioning** section that contains three ordering scenarios.
- 2) The **Rate Elements and USOCs** section was updated to reflect description changes in the existing elements and to add new elements:

Old Element	New Description/Element
2 Wire Unbundled ADSL Compatible Loop	2 Wire Unbundled ADSL compatible loop, includes manual service inquiry and facility reservation
NA	2 Wire Unbundled ADSL compatible loop, without manual service inquiry and facility reservation
2 Wire Unbundled HDSL Compatible Loop	2 Wire Unbundled HDSL compatible loop, includes manual service inquiry and facility reservation
NA	2 Wire Unbundled HDSL compatible loop, without manual service inquiry and facility reservation
4 Wire Unbundled HDSL Compatible Loop	4 Wire Unbundled HDSL compatible loop, includes manual service inquiry and facility reservation
NA	4 Wire Unbundled HDSL compatible loop, without manual service inquiry and facility reservation

- 3) In the **Service Order Requirements** section, additional clarification provided on “NCI at CLEC” codes format and a note added for 4 Wire HDSL:

“0” is a numeric zero character

Orders for 4 Wire HDSL must include two CLEC cable and pairs on the LSR

- 4) Old **Service Inquiry (SI) Form** (revised: 2/29/00) and **SI Preparation** replaced with new **Service Inquiry** (revised: 7/21/00) and **Instructions for Preparing Service Inquiry**.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Service Description

The Unbundled Asymmetrical Digital Subscriber Line (ADSL) or the High Bit Rate Digital Subscriber Line (HDSL) compatible loop is a dedicated digital transmission facility from BellSouth's Main Distribution Frame (MDF) to an end-user's premises. These loops will allow the end user to send and receive traffic that utilize the Enhanced Electronic (EE) capabilities for HDSL or ADSL when the loop is connected to the CLEC's appropriate equipment. The loop facility will include a Network Interface Device (NID) or equivalent demarcation point at the end-user's location for the purpose of connecting the loop to the customer's inside wire.

BellSouth offers the following:

- 2 Wire ADSL compatible loop
- 2 Wire HDSL compatible loop
- 4 Wire HDSL compatible loop

### Service Capabilities

BellSouth will only provide the loop facilities with these offerings. BellSouth does not provide the Enhanced Electronics such as the Digital Subscriber Line Access Multiplexer (DSLAM) or any other electronics with the unbundled ADSL or HDSL compatible loops.

The ADSL/HDSL compatible loops will be designed circuits and are provisioned with test points. BellSouth will provide a Design Layout Record (DLR).

BellSouth will perform installation testing (other than switch-based) that is needed to ensure the loop meets the specifications of [BellSouth's Technical Reference 73600 \(TR73600\)](#).

BellSouth will perform order coordination (OC) activities associated with Number Portability and/or disconnect orders. OC is intended to convert an existing customer to a new local service provider using the ADSL/HDSL compatible loops in a manner that minimizes the end-user's dial-tone interruption. BellSouth will notify the CLEC of the appropriate conversion time and will then perform the work within the negotiated interval.

If the CLEC requests work after normal working hours, overtime rates will apply for work outside of 8:00 a.m. to 5:00 p.m. local time.

If the CLEC's end user has existing service with BellSouth that utilizes a digital quality loop, and wants to change local service providers, BellSouth will attempt to reuse the end user's existing loop.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Technical Requirements

#### ADSL compatible loop

The ADSL compatible loop is a two wire metallic facility only. If the loop is available, it will be provided with no Digital Loop Carrier (DLC), load coils or repeaters. These loops will conform to the Revised Resistance Design (RRD) guidelines for non-loaded facilities as described in Bellcore SR-TSV-002275. The loop facility will consist of a loop 18kft or less which may include 6kft of bridge tap with a resistance of 1300 ohms or less if the loop is available.

Where the loop facility does not meet ADSL compatible loop specifications and it is determined that the loop can be modified to meet these specifications, the CLEC may request BellSouth's **Unbundled Loop Modification (ULM)**. In these situations and as a chargeable option, BellSouth will use the ULM process to modify the loop facility to ADSL compatible loop specifications. Additionally, the ULM product can be utilized to remove any bridged tap sections as requested by the CLEC. The rates for ULM are in addition to the ADSL loop rate.

BellSouth does not guarantee a particular bit rate associated with these loops. The transmission and bit rate speed of ADSL type services is dependent on the CLEC's equipment.

ADSL compatible loops will meet the parameters specified in **BellSouth TR73600**.

#### HDSL compatible loop

High-bit rate Digital Subscriber Line (HDSL) is a transport technology that can utilize a 2 or 4 Wire circuit. The HDSL compatible loop can be ordered as a 2 Wire or 4 Wire HDSL compatible loop. The loop facility consists of only metallic facilities and will be provisioned according to CSA guidelines as described in Committee T1 Technical Report No. 28. These loops include no more than 2500 feet of bridge tap/end section with a resistance of 850 ohms or less.

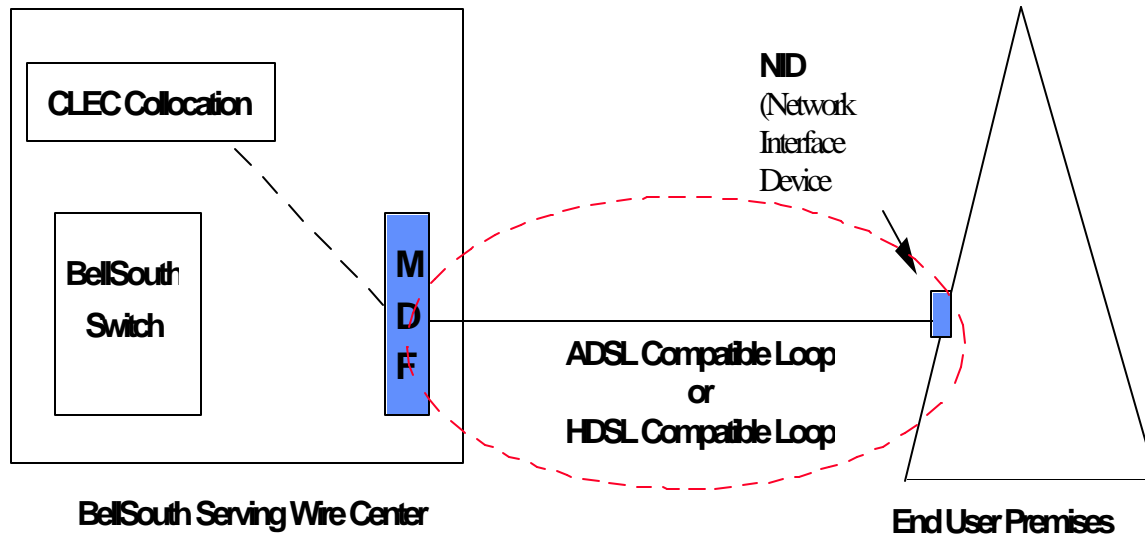
Where the loop facility does not meet HDSL compatible loop specifications and it is determined that the loop can be modified to meet these specifications, the CLEC may request BellSouth's ULM. In these situations and as a chargeable option, BellSouth will use the ULM process to modify the loop facility to HDSL compatible loop specifications. Additionally, the ULM product can be utilized to remove any bridged tap sections that are requested by the CLEC. The rates for ULM are in addition to the HDSL loop rate.

BellSouth does not guarantee a particular bit rate associated with these loops. The bit rate speed is dependent upon the CLEC's equipment.

HDSL compatible loops will meet the parameters specified in **BellSouth TR73600**.

## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Network Configuration



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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Ordering & Provisioning

This section will describe electronic and manual ordering scenarios available to the CLEC for ADSL or HDSL compatible loop ordering. It is important to note that the CLEC may obtain [Loop Make-up \(LMU\)](#) prior to placing a manual order for an ADSL or HDSL loop. However, the CLEC is always required to obtain a [LMU](#) with a reservation identification (RESID) when placing an electronic order for a new facility. If the ADSL/HDSL loop being ordered electronically is a reuse of an existing compatible facility, it is not necessary to obtain a RESID.

There is a key distinction in the manual ordering scenarios regarding “with prior LMU” and the “without prior LMU” scenario. The “with prior LMU” options indicate that LMU was ordered and obtained by the CLEC prior to placing the ADSL or HDSL loop order. The “without prior LMU” options indicate that the LMU look-up and facility reservation function will be handled *as part of* the ADSL/HDSL Service Inquiry and loop ordering process.

The LMU with Facility Reservation Number (FRN) option enables the CLEC to receive LMU and reserve a loop facility. For additional detail regarding the LMU/FRN process, refer to the [LMU Product Package](#).

If a prior LMU/FRN is obtained, the CLEC may use the FRN facility once it later submits a Local Service Request (LSR) to order an ADSL or HDSL loop. However, it should be noted that the specific loop type (ADSL or HDSL) ordered on the LSR must match the specifications of the facility for which prior LMU/FRN has been requested. BellSouth will use best efforts to assign the reserved facility on which the CLEC has obtained the FRN. If the loop type the CLEC has ordered on the LSR form does not match the reserved facility, the provisioning system will not use the reserved facility. Instead, the provisioning system will automatically override the FRN and attempt to assign a facility that does match the specifications of the loop type ordered. For information regarding the technical specifications refer to the Technical Requirements section of this document or to the [BellSouth TR73600](#).

The sub-sections on the following pages describe the various ordering scenarios:

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Ordering & Provisioning (continued)

#### Electronic Ordering

Electronic ordering for ADSL/HDSL loops is available to CLECs. To obtain detailed information regarding electronic ordering, refer to the [BellSouth Business Rules for Local Ordering](#).

The following steps must be followed when placing an electronic order for a **new facility**:

1. Place an order for LMU (electronic or manual)
2. Obtain a RESID (a.k.a., FRN)
3. Populate the RESID field on the electronic ordering form
4. Submit the electronic order

If the ADSL/HDSL loop being ordered is a **reuse of an existing facility** and the CLEC is certain that the facility is compatible to the loop type being ordered, it is not necessary to obtain a RESID. The following applies:

1. Prepare the electronic ordering form and populate the RESID field with all "Xs"
2. Submit the electronic order

**Note:** If Unbundled Loop Modification is required, the CLEC must submit the order manually according to the appropriate scenario in the Manual Ordering section below.

#### Manual Ordering

##### Loop Order **with prior** Loop Make-Up (LMU) and Facility Reservation Number (FRN)

The CLEC in this scenario would have requested a LMU with FRN prior to placing an order for the ADSL or HDSL compatible loop. In this scenario the CLEC does not require and is not ordering Unbundled Loop Modification (ULM) on requested loop facility. The non-recurring rate for the loop in this scenario excludes the cost of the manual service inquiry LMU and FRN since the CLEC has previously paid for the LMU with FRN.

#### Steps

1. CLEC requests and receives LMU/FRN through the [LMU process](#).
2. CLEC prepares and sends a Local Service Request (LSR) form w/FRN to the Local Carrier Service Center (LCSC). CLEC must specify the loop type (ADSL or HDSL) on the LSR.
3. Once a complete and correct LSR has been processed, the LCSC will forward a Firm Order Confirmation (FOC) to the CLEC.
4. The requested loop type will be provisioned through the ordering and provisioning systems according to the targeted intervals stated in the Interval section.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Ordering & Provisioning (continued)

#### Loop Order with prior LMU & FRN and with Unbundled Loop Modification (ULM)

This scenario is for an ADSL or HDSL compatible loop for which the CLEC is requesting **ULM**. The CLEC would have also requested a LMU with FRN prior to requesting the loop with ULM. The non-recurring rate for the loop in this scenario excludes the cost of the manual service inquiry LMU and FRN since the CLEC has previously paid for the LMU with FRN. Rates for ULM will be charged to the CLEC as separate rate elements.

#### Steps

1. CLEC requests and receives LMU/FRN through the **LMU process**.
2. CLEC prepares a firm order Service Inquiry (SI) and must specify the loop type, the required modifications and the FRN of the facility which requires modification.
3. CLEC prepares the LSR for the requested loop type with FRN.
4. CLEC sends the SI and LSR to its BellSouth CRSG/Account Team Representative.
5. CRSG/Account Team Representative holds the LSR and sends the SI to Outside Plant Engineering (OSPE).
6. OSPE issues an engineering job for the requested ULMs and determines an estimated completion date (ECD) for completing the modifications.
7. OSPE forwards the SI with ULM ECD to the CRSG/Account Team Representative.
8. The CRSG notifies the CLEC of the ULM ECD.
9. CRSG/Account Team Representative forwards the SI and the LSR to the LCSC
10. If the LSR is complete and correct, the LCSC will process the order for the loop with ULM and issue a FOC to the CLEC.



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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Ordering & Provisioning (continued)

#### Loop Order without prior LMU & FRN

This scenario is for an ADSL or HDSL compatible loop and the CLEC has not requested prior LMU & FRN. The non-recurring rate for the loop in this scenario will include the cost of the manual service inquiry and FRN.

#### Steps

1. CLEC prepares a firm order SI and LSR for a specific loop type (ADSL or HDSL).
2. CLEC sends the SI and LSR to its BellSouth CRSG/Account Team Representative.
3. CRSG/Account Team Representative holds the LSR and sends the SI to Outside Plant Engineering (OSPE).
4. **If the requested loop type facility is available**, OSPE completes the SI with the FRN facility and sends the SI back to the CRSG/Account Team Representative. **(proceed to step 10)**
5. **If the requested loop facility is not available but can be provided with modifications**, OSPE will indicate on the SI that the facility is not available but could be provided with a job for Unbundled Loop Modification (ULM). OSPE will return the SI to the CRSG/Account Team Representative. **(proceed to step 7)**
6. **If the requested loop type facility is not available and cannot be provided with modifications**, refer to the **Note** below.
7. The CRSG/Account Team Representative forwards the SI to the CLEC for the CLEC's approval for Unbundled Loop Modification (ULM). CLEC will indicate its approval for ULM by placing a check (✓) for ULM-LC and/or ULM-BT on the SI and then return the SI to CRSG/Account Team Representative. The CLEC will also forward an updated LSR with the appropriate modification USOCs.
8. The SI is returned to OSPE who will initiate a job for Unbundled Loop Modification. OSPE will provide the job number and estimated completion date (ECD) on the SI and return the SI to the CRSG/Account team.
9. The CRSG/Account Team Representative will notify the CLEC of the ECD.
10. CRSG/Account Team Representative forwards the SI & LSR to the LCSC.
11. If the LSR is complete and correct, the LCSC will process the order and issue a FOC to the CLEC.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Ordering & Provisioning (continued)

**Note:** There may be several reasons for the unavailability of compatible facilities for the loop type being ordered by the CLEC. The OSPE will indicate which reason applies on the Service Inquiry (SI). Below is a brief synopsis of those reasons. For additional information regarding possible options to remedy the “facility unavailable” situation, please contact your BellSouth CRSG/Account Team Representative.

- **Facilities are out of range** – OSPE will indicate why the loop is out of range and cannot be provided on the SI. If the facility would qualify for a different loop type, the possible loop type will also be indicated. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC.
- **No compatible facilities/available by a job** – OSPE indicates that the facilities will be made available by a job and Special Construction (SC) is not applicable. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC. The SI will state an estimated completion date (ECD). The job will be completed before the service orders are issued.
- **No compatible facilities/available w/SC** – OSPE indicates that the facilities could be made available by a job and Special Construction (SC) is applicable. OSPE will describe the SC work in the comments section of the SI. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC. CLEC can then make the decision whether or not to pursue the SC process. If the CLEC decides to move forward with the SC process, the CLEC will be responsible for costs associated with BellSouth providing the quote and for the costs of implementing the SC job.
- **No compatible facilities/available with LST/CDP** – OPSE indicates that the facilities may be made available through Line and Station Transfers (LSTs) or by clearing a defective pair (CDP). OSPE will include remarks in the “comments” section of the SI that the facilities are not immediately available but an attempt will be made to make facilities available via cuts (LSTs) or CDP. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Service Order Requirements

#### Local Service Request (LSR) form

The CLEC will complete a Local Service Request (LSR) form according to the [Local Exchange Ordering-Implementation Guide](#) or the [BellSouth Business Rules for Local Ordering](#).

The following information that is unique to ADSL/HDSL is also required on the LSR:

LSR Field	Information Required			
NC/NCI	Loop Type	NC	NCI <sup>2</sup> at CLEC	SEC NCI <sup>3</sup> at End User
	2 Wire ADSL	LXR-	02QB9.00A	02DU9.00A
	2 Wire HDSL	LXC-	02QB9.00H	02DU9.00H
	<b>2 Wire HDSL<sup>1</sup></b>	LXC	02QB9.004	02DU9.004
	4 Wire HDSL**	LXC-	04QB9.00H	04DU9.00H
RMKS	FRN (if Loop Make-up and FRN ordered prior to placing loop order) when placing order manually			
RESID	ADSL or HDSL loop reservation ID (required when placing electronic order)			
Project	If Unbundled Loop Modification is ordered, populate with the following” (ADSL/HDSL orders requiring ULM must be submitted manually) <ul style="list-style-type: none"><li>• ULMC – for Load Coil removal</li><li>• ULMBT – for Bridge Tap removal</li><li>• ULMBTLC – for Load Coil and Bridge Tap removal</li></ul>			

<sup>1</sup> Optional NCI code that can be used for a 2 Wire HDSL at the discretion of the CLEC – currently, this NCI code is only available to be used with an order placed manually.

<sup>2</sup> “0” is a numeric zero character

<sup>3</sup> Orders for 4 Wire HDSL must include two CLEC cable and pairs on the LSR.

#### Service Inquiry (SI) form

A Service Inquiry is required, dependent on the ordering scenarios described in the **Ordering & Provisioning** section, for ordering an ADSL/HDSL compatible loop. Refer to the “[Service Inquiry](#)” and “[Instructions for Preparing Service Inquiry](#)” for the SI.

#### LSR & SI Transmittal

- CLEC sends the firm order SI and a LSR to a CRSG/Account Team Representative.
- Refer to the [Complex Resale Support Group](#) web site and then click on “**Unbundled Network Orders**” for submission requirements.
- CLEC should contact its BellSouth Account Team Representative for additional information regarding transmittal of SI and LSR if CRSG Representative is not known.
- SI receipt acknowledgement by BellSouth will be in the same manner in which the CLEC submitted the SI.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Rate Elements & USOCs

Rates for ADSL and HDSL compatible loops will need to be included in your contract. Rates may be interim and subject to true up pending approval of final rates by the respective State Commissions. Commission orders will specify the dates back to which true-ups are applicable.

Rate Element	USOC
2 Wire Unbundled ADSL compatible loop, includes manual service inquiry and facility reservation	UAL2X
2 Wire Unbundled ADSL compatible loop, without manual service inquiry and facility reservation	UAL2W
2 Wire Unbundled HDSL compatible loop, includes manual service inquiry and facility reservation	UHL2X
2 Wire Unbundled HDSL compatible loop, without manual service inquiry and facility reservation	UHL2W
4 Wire Unbundled HDSL compatible loop, includes manual service inquiry and facility reservation	UHL4X
4 Wire Unbundled HDSL compatible loop, without manual service inquiry and facility reservation	UHL4W
Order Coordination – Time Specific (per order)	OCOSL

### Other Non-Recurring Charges

*Expedite Charge* – applies if CLEC requests an order interval less than the stated “standard interval” in the BellSouth Products and Services Interval Guide.

*Manual Service Order* -- applies if order is manually submitted

*Electronic Service Order* – applies if order is submitted electronically

*Order Cancellation* – applies if the CLEC cancels an order. This charge is for work associated with provisioning either ADSL or HDSL loop pairs at the time the CLEC cancels an order.

*Service Order Modification Charge* – Applies if the CLEC modifies a service order after the Firm Order Confirmation has been issued.

*Overtime Charge* – Applies for work requested outside of normal working hours.

*Time & Material* – Applies for CLEC requested dispatch, (outside the central office) if “no trouble found”

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Intervals

Provisioning intervals for ADSL/HDSL loops can be found in the [BellSouth Products and Services Interval Guide](#).

### Maintenance & Repair Procedures

The CLEC is responsible for testing and pre-screening any trouble conditions to make sure the trouble is with ADSL/HDSL compatible loop pair before calling BellSouth. If the CLEC's testing isolates the repair problem to BellSouth's unbundled loop, the CLEC should notify the Customer Wholesale Interconnection Network Services (CWINS) Center.

The CLEC must provide the following information to CWINS Center when reporting a repair problem:

- ADSL/HDSL pair Circuit ID
- Description of the trouble

If BellSouth dispatches a technician on a CLEC reported trouble call and no ADSL /HDSL loop trouble is found, BellSouth will charge the CLEC for time spent on the dispatch and for time spent testing the ADSL or HDSL compatible loop.

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## **BellSouth Unbundled ADSL/HDSL Compatible Loops**

### **Contract Specific Provisions**

Before any ADSL/HDSL compatible loop can be ordered, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for each loop type that is being requested. This agreement must be in effect for all states where the CLEC plans to order these unbundled loops.

The information contained herein applies to the ADSL/HDSL compatible loop general offering and is part the standard BellSouth agreement. The general offering is in accordance with BellSouth policies, procedures and regulatory obligations as well as the Standard Interconnection Agreement.

The general offering does not address specific contract issues within a CLEC's Interconnection Agreement that may be different from the general offering. Where specific contract issues differ from the information provided here, the contract provisions will prevail for the term of the specific CLEC Interconnection Agreement. Otherwise, the general offering provisions will apply.

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## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Acronyms

ADSL	Asymmetrical Digital Subscriber Line
CDP	Clear Defective Pair
CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
CRSG	Complex Resale Support Group
DLC	Digital Loop Carrier
DLR	Design Layout Record
DSLAM	Digital Subscriber Line Access Multiplexer
ECD	Estimated Completion Date
EE	Enhanced Electronic
FOC	Firm Order Confirmation
FRN	Facility Reservation Number
HDSL	High Bit Rate Digital Subscriber Line
ID	Identification
LCSC	Local Carrier Service Center
LMU	Loop Make-up
LSOGv2	Local Service Ordering Guidelines version 2
LSOGv4	Local Service Ordering Guidelines version 4
LSR	Local Service Request
LST	Line & Station Transfer
MDF	Main Distribution Frame
NC	Network Channel
NCI	Network Channel Interface
NID	Network Interface Device
OBF	Ordering & Billing Forum
OC	Order Coordination
OSPE	Outside Plant Engineering
PON	Purchase Order Number
RESID	Reservation Identification
RRD	Revised Resistance Design
SC	Special Construction

---

## BellSouth Unbundled ADSL/HDSL Compatible Loops

### Acronyms (continued)

SECNCI	Secondary Network Channel Interface
SI	Service Inquiry
TR73600	Technical Reference 73600
UCL/L	Unbundled Copper Loop/Long
UCL/S	Unbundled Copper Loop/Short
ULM	Unbundled Loop Modification
ULM-BT	Bridged Tap
ULM-LC	Load Coil
UNE	Unbundled Network Element
USOC	Universal Service Order Code





**Exhibit No. WGL - 3**

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## **BellSouth Unbundled Copper Loop - Designed**

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### ***Unbundled Copper Loop - Designed***

#### ***CLEC Information Package***

(Version 5)

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## BellSouth Unbundled Copper Loop - Designed

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## **BellSouth Unbundled Copper Loop - Designed**

### **Introduction & Scope**

This Product Information Package is intended to provide to CLECs a product description and general ordering information specific to the UNE described herein. Detailed ordering guidelines are provided in documents located on the BellSouth Interconnection Web site.

The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the CLEC Notification Process.

Please contact your BellSouth Account Manager, if you have any questions about the information contained herein.

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## BellSouth Unbundled Copper Loop - Designed

### Revisions

#### Version 5

- 1) Page 1 revisions:
  - Changed the title 'Unbundled Copper Loop' to 'Unbundled Copper Loop – Designed'
  - 'Version 5' replaces 'Version 4'.
- 2) **Header** on each page – Changed the title '**BellSouth Unbundled Copper Loop**' to '**BellSouth Unbundled Copper Loop – Designed**'.
- 3) Footnote on each page – date changed from '3/30/01' to '6/29/01' and 'Version 4' changed to 'Version 5'.
- 4) Replaced "UCL" with "UCL-D".
- 5) **Loop Order with prior LMU & FRN and with Unbundled Loop Modification (ULM)** section – changed steps 8, 9 and 10 to reflect internal process changes.
- 6) **Loop Order without prior LMU & FRN** section – changed steps 9, 10 and 11 to reflect internal process changes.
- 7) **Service Order Requirements** section, **LSR & SI Transmittal** sub-section – added information regarding CRSG/Account Team acknowledgement of SI receipt.

#### Version 4

- 1) Page 1 – 'Version 4' replaces 'Version 3'.
- 2) **Footnote** on each page – date changed from '10/13/00' to '3/30/01' and 'Version 3' changed to 'Version 4'.
- 3) **Ordering & Provisioning** section, 1<sup>st</sup> paragraph;
  - Deleted old 1<sup>st</sup> paragraph and replaced with new 1<sup>st</sup> paragraph to reflect electronic ordering references.
  - Deleted old 2<sup>nd</sup> paragraph and replaced with new 2<sup>nd</sup> paragraph to clarify the manual ordering scenarios 'with prior' and 'without prior' LMU.
  - Deleted 2<sup>nd</sup> sentence of third paragraph. LMU parameters should be referenced in the LMU product package.
- 4) **Ordering & Provisioning (continued)** section – added '**Electronic Ordering**' sub-section.
- 5) **Service Order Requirements** section; 'Local Service Request (LSR) form' sub-section;
  - Replaced 'BellSouth Ordering Guide for CLECs (Local Service Ordering Guidelines, version 2 (LSOGv2))' with '**Local Exchange Ordering-Implementation Guide**'.
  - Replaced 'Local Ordering Guidelines, version 4 (LSOGv4)' with '**BellSouth Business Rules for Local Ordering**'
  - Within the table under the '**Information Required**' column, added "when placing order manually" after 'FRN'.
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## BellSouth Unbundled Copper Loop - Designed

### Revisions (continued)

- Within the table, added 'RESID' field under the '**LSR Field**' column and; "UCL reservation ID (required when placing electronic order)" under the '**Information Required**' column.
- 6) **Service Order Requirements** section – '**Service Inquiry (SI) form**' sub-section;
  - Replaced last sentence with "Refer to the "**Service Inquiry**" and "**Instructions for Preparing Service Inquiry**" for the SI".
  - User will click on "**Service Inquiry**" to download the SI and instructions.
- 7) **Maintenance & Repair Procedures** section – Replaced the 'Unbundled Network Element (UNE) Center' with 'Customer Wholesale Interconnection Network Services (CWINS) Center'.
- 8) Deleted **Service Inquiry and Instructions for Preparing Service Inquiry** sections from the CLEC Information Package and re-established as a 'download' document from '**Service Inquiry (SI) form**' sub-section.
- 9) **Intervals** section – Replaced old paragraph and interval table with new paragraph to reference the **BellSouth Products and Services Interval Guide**.
- 10) **Acronyms** section – added 'RESID' acronym and 'Reservation Identification'.

### Version 3

- 1) Page 1 – "Version 3" replaces "Version 2".
- 2) **Footnote** on each page – date changed from "8/25/00" to "10/13/00" and "Version 2" changed to "Version 3".
- 3) **Service Order Requirements** section – **LSR form sub-section**:
  - Added "Project" under the **LSR Field**
  - Under the "**Information Required**" column added "If Unbundled Loop Modification is ordered, populate with the following:
    - ULMLC – for Load Coil removal
    - ULMBT – for Bridge Tap removal
    - ULMBTLC – for Load Coil and Bridge Tap removal"

### Version 2

1. Page 1 – added "Version 2".
2. **Footnote** on each page – date changed from 3/10/00 to 8/25/00. Deleted "UCLpkg.doc" and added "Version 2".
3. The version 1 **Ordering and Provisioning** and **Service Inquiry (SI) Process** sections were replaced with a new **Ordering and Provisioning** section that contains three ordering scenarios.

## BellSouth Unbundled Copper Loop - Designed

### Revisions (continued)

#### 4. Service Order Requirements section:

- **LSR form sub-section** – In first paragraph, deleted Ordering and Billing Forum (OBF) guidelines reference and replace with “**BellSouth Ordering Guide for CLECs** (LSOGv2) or the **BellSouth Business Rules for Local Ordering** (LSOGv4))”.
- **LSR form sub-section** – In first paragraph, deleted last sentence.
- **LSR form sub-section** – second paragraph, added clarification for “NCI at CLEC” and “SEC NCI at End User” codes format:  
 “O” is a numeric zero character  
 \*\* “O” is an alpha (letter O)
- **LSR form sub-section** – second paragraph, under LSR Field, added additional field “RMKS”. Under Information Required, added “FRN (if Loop Make-up and FRN ordered prior to placing loop order)”.

#### 5. Rate Elements and USOCs section -- updated to reflect description changes in the existing elements and to add new elements:

Old Element	New Description/Element	USOC
2 Wire Unbundled Copper Loop/S, ≤ 18kft	2 Wire UCL/S, ≤ 18kft, <u>includes</u> manual service inquiry and facility reservation	UCLPB
NA	2 Wire UCL/S, ≤ 18kft, <u>without</u> manual service inquiry and facility reservation	UCLPW
4 Wire Unbundled Copper Loop/S, ≤ 18kft	4 Wire UCL/S, ≤ 18kft, <u>includes</u> manual service inquiry and facility reservation	UCL4S
NA	4 Wire UCL/S, ≤ 18kft, <u>without</u> manual service inquiry and facility reservation	UCL4W
2 Wire Unbundled Copper Loop/L, > 18kft	2 Wire UCL/L, > 18kft, <u>includes</u> manual service inquiry and facility reservation	UCL2L
NA	2 Wire UCL/L, > 18kft, <u>without</u> manual service inquiry and facility reservation	UCL2W
4 Wire Unbundled Copper Loop/L, > 18kft	4 Wire UCL/L, > 18kft, <u>includes</u> manual service inquiry and facility reservation	UCL4L
NA	4 Wire UCL/L, > 18kft, <u>without</u> manual service inquiry and facility reservation	UCL4O

#### 6. Service Inquiry (SI) Form (revised: 2/29/00) and SI Preparation replaced with new Service Inquiry (revised: 7/21/00) and Instructions for Preparing Service Inquiry.

#### 7. Added an Acronyms section



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## **BellSouth Unbundled Copper Loop - Designed**

### **Service Description**

The Unbundled Copper Loop – Designed (UCL-D) is a dedicated metallic transmission facility from BellSouth's Main Distribution Frame (MDF) to a customer's premises. This loop is commonly referred to as a "dry copper" loop because it does not have any intervening equipment such as load coils, repeaters, etc., between the end user premises and the Serving Wire Center (SWC). BellSouth offers 2 & 4 Wire UCL/S (Short) and 2 & 4 Wire UCL/L (Long). The UCL/S is any Resistance Design (RD) copper loop that is less than or equal to 18 kilofeet (kft). The UCL/L will be any copper loop that is longer than 18kft.

These loops are not intended to support any particular service and may be utilized by the CLEC to provide a wide-range of telecommunications services so long as those services do not adversely affect BellSouth's network. This facility will include a Network Interface Device (NID) or equivalent demarcation point at the end-user's customer's location for the purpose of connecting the loop to the customer's inside wire.

### **Service Capabilities**

BellSouth will only provide the loop facilities with these offerings.

UCL-D loops will be designed circuits and are provisioned with test points. BellSouth will provide a Design Layout Record (DLR).

BellSouth will perform installation testing (other than switch-based) that is needed to ensure the loop meets the specifications of [BellSouth's TR73600](#).

At the CLEC's option and for an additional charge, BellSouth will perform order coordination (OC) activities associated with Number Portability and/or disconnect orders. OC is intended to convert an existing customer to a new local service provider using the UCL-D in a manner that minimizes the end-user's dial-tone interruption. BellSouth will notify the CLEC of the appropriate conversion time and will then perform the work within the negotiated interval.

If the CLEC requests work after normal working hours, overtime rates will apply for work outside of 8:00 a.m. to 5:00 p.m. local time

If the CLEC's end user has existing service with BellSouth that utilizes a compatible copper loop, and wants to change local service providers, BellSouth will attempt to reuse the end user's existing loop.

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## BellSouth Unbundled Copper Loop - Designed

### Technical Requirements

The UCL/S will be a Resistance Design (RD) loop of 1300 ohms or less and will consist of non-loaded copper with a total length of 18 kft or less. In addition, up to 6 kft of bridged tap may be included on the loop facility.

The UCL/L is a loop of up to 2800 ohms and will consist of non-loaded copper with a total length greater than 18 kft. In addition, up to 12 kft of bridged tap may be included on the loop facility. All copper loops longer than 18kft within BellSouth's network typically will have load coils or other intervening equipment. Therefore, the CLEC may have to request Unbundled Loop Modification (ULM).

For a CLEC requested loop facility that does not meet UCL-D specifications and it is determined that the loop can be modified to meet these specifications, the CLEC may request that BellSouth's **Unbundled Loop Modification (ULM)**. In these situations and as a chargeable option, BellSouth will use the ULM process to modify the requested loop facility to UCL-D specifications. Additionally, the ULM product must be utilized to remove any bridged tap sections that are requested by the CLEC. The rates for ULM are in addition to the UCL-D rate.

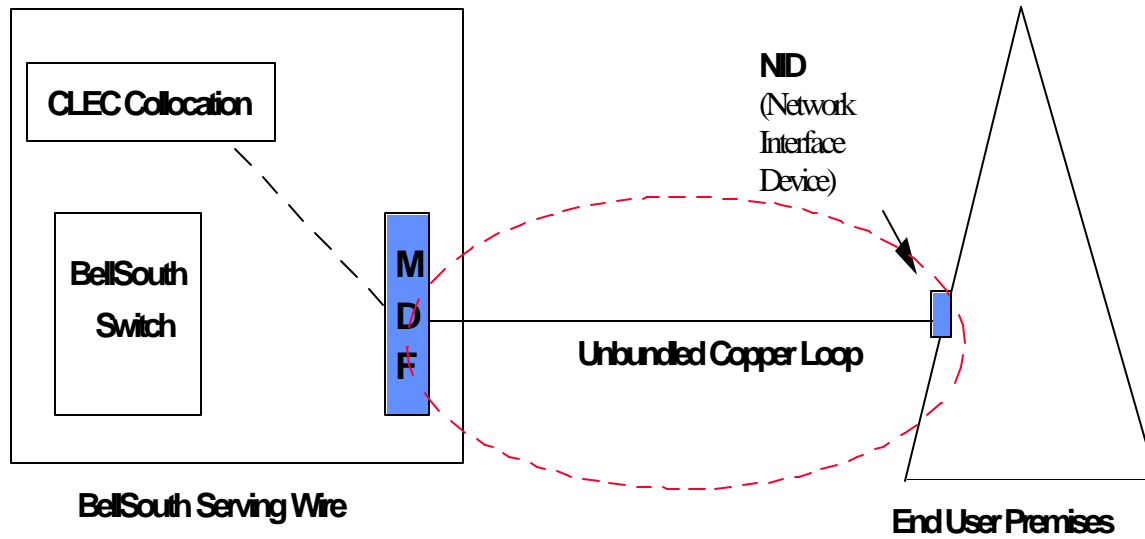
BellSouth will only ensure that the UCL-D has electrical continuity and provides balance relative to tip and ring.

These loops are not designed or intended to provide any particular service. The loop may be attached to a variety of equipment both at the CLEC's collocation space and the end user premises. BellSouth does not guarantee a particular bit rate associated with these loops.

UCL-D will meet the parameters specified in **Technical Reference (TR) 73600**.

## BellSouth Unbundled Copper Loop - Designed

### Network Configuration



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## BellSouth Unbundled Copper Loop - Designed

### Ordering & Provisioning

This section will describe electronic and manual ordering scenarios available to the CLEC for UCL-D ordering. It is important to note that the CLEC may obtain **Loop Make-up (LMU)** prior to placing a manual order for UCL-D. However, the CLEC is always required to obtain a **LMU** with a reservation identification (RESID) when placing an electronic order for a new facility. If the UCL-D being ordered electronically is a reuse of an existing compatible facility, it is not necessary to obtain a RESID.

There is a key distinction in the manual ordering scenarios regarding “with prior LMU” and the “without prior LMU” scenario. The “with prior LMU” options indicate that LMU was ordered and obtained by the CLEC prior to placing the UCL-D order. The “without prior LMU” options indicate that the LMU look-up and facility reservation function will be handled *as part of* the UCL-D Service Inquiry and loop ordering process.

The LMU with Facility Reservation Number (FRN) option enables the CLEC to receive LMU and reserve a loop facility. For additional detail regarding the LMU/FRN process, refer to the **LMU Product Package**.

If a prior LMU/FRN is obtained, the CLEC may use the FRN facility once it later submits a Local Service Request (LSR) to order a UCL-D. However, it should be noted that the specific loop type ordered on the LSR must match the specifications of the facility for which prior LMU/FRN has been requested. BellSouth will use best efforts to assign the reserved facility on which the CLEC has obtained the FRN. If the loop type the CLEC has ordered on the LSR form does not match the reserved facility, the provisioning system will not use the reserved facility. Instead, the provisioning system will automatically override the FRN and attempt to assign a facility that does match the specifications of the loop type ordered. For information regarding the technical specifications refer to the Technical Requirements section of this document or to the **BellSouth TR73600**.

The sub-sections on the following pages describe the various ordering scenarios:

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## BellSouth Unbundled Copper Loop - Designed

### Ordering & Provisioning (continued)

#### Electronic Ordering

Electronic ordering for UCL-D is available to CLECs. To obtain detailed information regarding electronic ordering, refer to the [BellSouth Business Rules for Local Ordering](#).

The following steps must be followed when placing an electronic order for a **new facility**:

1. Place an order for LMU (electronic or manual)
2. Obtain a RESID (a.k.a., FRN)
3. Populate the RESID field on the electronic ordering form
4. Submit the electronic order

If the UCL-D being ordered is a **reuse of an existing facility** and the CLEC is certain that the facility is compatible to the loop type being ordered, it is not necessary to obtain a RESID. The following applies:

1. Prepare the electronic ordering form and populate the RESID field with all "Xs"
2. Submit the electronic order

**Note:** If Unbundled Loop Modification is required, the CLEC must submit the order manually according to the appropriate scenario in the Manual Ordering section below.

#### Manual Ordering

##### Loop Order with prior Loop Make-Up (LMU) and Facility Reservation Number (FRN)

The CLEC in this scenario would have requested a LMU with FRN prior to placing an order for the UCL-D. In this scenario the CLEC does not require and is not ordering Unbundled Loop Modification (ULM) on the requested loop facility. The non-recurring rate for the UCL-D in this scenario excludes the cost of the manual service inquiry LMU and FRN since the CLEC has previously paid for the LMU with FRN.

#### Steps

1. CLEC requests and receives LMU/FRN through the [LMU process](#).
2. CLEC prepares and sends a Local Service Request (LSR) form w/FRN to the Local Carrier Service Center (LCSC). CLEC must specify UCL-D on the LSR.
3. Once a complete and correct LSR has been processed, the LCSC will forward a Firm Order Confirmation (FOC) to the CLEC.
4. The requested loop type will be provisioned through the ordering and provisioning systems according to the targeted intervals stated in the Interval section.

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## BellSouth Unbundled Copper Loop - Designed

### Loop Order with prior LMU & FRN and with Unbundled Loop Modification (ULM)

This scenario is for a UCL-D for which the CLEC is requesting **ULM**. The CLEC would have also requested a LMU with FRN prior to requesting the loop with ULM. The non-recurring rate for the loop in this scenario excludes the cost of the manual service inquiry LMU and FRN since the CLEC has previously paid for the LMU with FRN. Rates for ULM will be charged to the CLEC as separate rate elements.

### Steps

1. CLEC requests and receives LMU/FRN through the **LMU process**.
2. CLEC prepares a firm order Service Inquiry (SI) and must specify UCL-D, the required modifications and the FRN of the facility which requires modification.
3. CLEC prepares the LSR for the requested loop type with FRN.
4. CLEC sends the SI and LSR to its BellSouth CRSG/Account Team Representative.
5. CRSG/Account Team Representative holds the LSR and sends the SI to Outside Plant Engineering (OSPE).
6. OSPE issues an engineering job for the requested ULMs and determines an estimated completion date (ECD) for completing the modifications.
7. OSPE forwards the SI with ULM ECD to the CRSG/Account Team Representative.
8. The CRSG notifies the CLEC of the ULM ECD.
9. CRSG/Account Team Representative forwards the SI and the LSR to the LCSC.
10. If the LSR is complete and correct, the LCSC will process the order for the loop with ULM and issue an FOC to the CLEC.

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## BellSouth Unbundled Copper Loop - Designed

### Ordering & Provisioning (continued)

#### Loop Order without prior LMU & FRN

This scenario is for a UCL-D and the CLEC has not requested prior LMU & FRN. The non-recurring rate for the loop in this scenario will include the cost of the manual service inquiry and FRN.

#### Steps

1. CLEC prepares a firm order SI and LSR for a UCL-D.
2. CLEC sends the SI and LSR to its BellSouth CRSG/Account Team Representative.
3. CRSG/Account Team Representative holds the LSR and sends the SI to Outside Plant Engineering (OSPE).
4. **If the UCL-D facility is available**, OSPE completes the SI with the FRN facility and sends the SI back to the CRSG/Account Team Representative. **(proceed to step 10)**
5. **If the UCL-D facility is not available but can be provided with modifications**, OSPE will indicate on the SI that the facility is not available but could be provided with a job for Unbundled Loop Modification (ULM). OSPE will return the SI to the CRSG/Account Team Representative. **(proceed to step 7)**
6. **If the requested loop type facility is not available and cannot be provided with modifications**, refer to the **Note** below.
7. The CRSG/Account Team Representative forwards the SI to the CLEC for the CLEC's approval for Unbundled Loop Modification (ULM). CLEC will indicate its approval for ULM by placing a check (✓) for ULM-LC and/or ULM-BT on the SI and then return the SI to CRSG/Account Team Representative. The CLEC will also forward an updated LSR with the appropriate modification USOCs.
8. The SI is returned to OSPE who will initiate a job for Unbundled Loop Modification. OSPE will provide the job number and estimated completion date (ECD) on the SI and return the SI to the CRSG/Account team.
9. The CRSG/Account Team Representative will notify the CLEC of the ECD.
10. CRSG/Account Team Representative forwards the SI & LSR to the LCSC.
11. If the LSR is complete and correct, the LCSC will process the order and issue an FOC to the CLEC.
12. The OSPE job will do the loop modifications necessary to bring the loop facility to design standards for a UCL-D. The job will also include a FRN for the facility to be modified if the pair being modified is a spare pair.

---

## BellSouth Unbundled Copper Loop - Designed

### Ordering & Provisioning (continued)

**Note:** There may be several reasons for the unavailability of compatible facilities for the loop type being ordered by the CLEC. The OSPE will indicate which reason applies on the Service Inquiry (SI). Below is a brief synopsis of those reasons. For additional information regarding possible options to remedy the “facility unavailable” situation, please contact your BellSouth CRSG/Account Team Representative.

- **Facilities are out of range** – OSPE will indicate why the loop is out of range and cannot be provided on the SI. If the facility would qualify for a different loop type, the possible loop type will also be indicated. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC.
- **No compatible facilities/available by a job** – OSPE indicates that the facilities will be made available by a job and Special Construction (SC) is not applicable. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC. The SI will state an estimated completion date (ECD). The job will be completed before the service orders are issued.
- **No compatible facilities/available w/SC** – OSPE indicates that the facilities could be made available by a job and Special Construction (SC) is applicable. OSPE will describe the SC work in the comments section of the SI. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC. CLEC can then make the decision whether or not to pursue the SC process. If the CLEC decides to move forward with the SC process, the CLEC will be responsible for costs associated with BellSouth providing the quote and for the costs of implementing the SC job.
- **No compatible facilities/available with LST/CDP** – OPSE indicates that the facilities may be made available through Line and Station Transfers (LSTs) or by clearing a defective pair (CDP). OSPE will include remarks in the “comments” section of the SI that the facilities are not immediately available but an attempt will be made to make facilities available via cuts (LSTs) or CDP. The SI will be returned to the CRSG/Account Team Representative to advise the CLEC.



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## BellSouth Unbundled Copper Loop - Designed

### Service Order Requirements

#### Local Service Request (LSR) form

The CLEC will complete a Local Service Request (LSR) form according to the [Local Exchange Ordering-Implementation Guide](#) or the [BellSouth Business Rules for Local Ordering](#).

The following information that is unique to UCL-D is also required on the LSR:

LSR Field	Information Required			
NC/NCI	Loop Type	NC	NCI at CLEC*	SEC NCI at End User*
	2 Wire UCL/S ( $\leq$ 18 kft)	LX-N	02QC3.OOF	02NO2
	4 Wire UCL/S ( $\leq$ 18 kft)	LX-N	04QC3.OOF	04NO2
	2 Wire UCL/L ( $>$ 18 kft)	LX--	02QC3.OOF	02NO2
	4 Wire UCL/L ( $>$ 18 kft)	LX--	04QC3.OOF	04NO2
RMKS	FRN (if Loop Make-up and FRN ordered prior to placing loop order) (when placing order manually)			
RESID	UCL-D reservation ID (required when placing electronic order for a new facility)			
Project	If Unbundled Loop Modification is ordered, populate with the following: <ul style="list-style-type: none"><li>• ULMC – for Load Coil removal</li><li>• ULMBT – for Bridge Tap removal</li><li>• ULMBTLC – for Load Coil and Bridge Tap removal</li></ul>			

\* "0" is a numeric zero character

\* "O" is an alpha (letter O)

#### Service Inquiry (SI) form

A Service Inquiry is required, dependent on the ordering scenarios described in the **Ordering & Provisioning** section, for ordering a UCL-D. Refer to the ["Service Inquiry" and the "Instructions for Preparing Service Inquiry"](#) for the SI.

#### LSR & SI Transmittal

- CLEC sends the firm order SI and a LSR to a CRS/Account Team Representative.
- The primary method of submission to the CRS is through email. Refer to the [Complex Resale Support Group](#) web site and then click on **"Unbundled Network Orders"** for submission requirements.
- CLEC should contact its BellSouth Account Team Representative for additional information regarding transmittal of SI and LSR if CRS Representative is not known.
- The CRS/Account Team Representative will acknowledge receipt of the SI in the same manner in which the CLEC submitted the SI.

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## BellSouth Unbundled Copper Loop - Designed

### Rate Elements & USOCs

Rates for UCL-Ds will need to be included in the CLEC's Interconnection Agreement contract. Rates may be interim and subject to true-up pending approval of final rates by the respective State Commissions. Commission orders will specify the dates back to which true-ups are applicable.

Unbundled Copper Loop-Designed Rate Elements	USOC
2 Wire UCL/S $\leq$ 18kft, <u>includes</u> manual service inquiry and facility reservation	UCLPB
2 Wire UCL/S $\leq$ 18kft, <u>without</u> manual service inquiry and facility reservation	UCLPW
4 Wire UCL/S $\leq$ 18kft, <u>includes</u> manual service inquiry and facility reservation	UCL4S
4 Wire UCL/S $\leq$ 18kft, <u>without</u> manual service inquiry and facility reservation	UCL4W
2 Wire UCL/L $>$ 18kft, <u>includes</u> manual service inquiry and facility reservation	UCL2L
2 Wire UCL/L $>$ 18kft, <u>without</u> manual service inquiry and facility reservation	UCL2W
4 Wire UCL/L $>$ 18kft, <u>includes</u> manual service inquiry and facility reservation	UCL4L
4 Wire UCL/L $>$ 18kft, <u>without</u> manual service inquiry and facility reservation	UCL4O
Order Coordination (per loop)	UCLMC

### Other Non-Recurring Charges

*Manual Service Order* -- applies if order is manually submitted and electronic ordering is available.

*Order Cancellation* – applies if the CLEC cancels an order. This charge is for work associated with provisioning UCL-D pairs at the time the CLEC cancels an order.

*Service Order Modification Charge* – applies if the CLEC modifies a service order after the Firm Order Confirmation has been issued.

*Overtime Charge* – applies for work requested outside of normal working hours.

*Time & Material* – applies for dispatch out if “no trouble found”

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## BellSouth Unbundled Copper Loop - Designed

### Intervals

Provisioning intervals for UCL-D can be found in the [BellSouth Products and Services Interval Guide](#). These intervals apply to ordering UCL-D after any required loop modification or special construction has been completed.

### Maintenance & Repair Procedures

The CLEC is responsible for testing and pre-screening any trouble conditions to make sure the trouble is with the UCL-D pair before calling BellSouth. If the CLEC's testing isolates the repair problem to BellSouth's unbundled loop, the CLEC should notify the Customer Wholesale Interconnection Network Services (CWINS) Center. The target interval for maintenance resolution is 24 hours from the time the trouble is reported to the CWINS Center.

The CLEC must provide the following information to UNE Center when reporting a repair problem:

- UCL-D pair Circuit ID
- Description of the trouble

If BellSouth dispatches a technician on a CLEC reported trouble call and no UCL-D trouble is found, BellSouth will charge the CLEC for time spent on the dispatch and for time spent testing the UCL-D.

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## **BellSouth Unbundled Copper Loop - Designed**

### **Contract Specific Provisions**

Before any UCL-D loop can be ordered, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for each loop type that is being requested. This agreement must be in effect for all states where the CLEC plans to order these unbundled loops.

The information contained herein applies to the UCL-D general offering and is part the standard BellSouth agreement. The general offering is in accordance with BellSouth policies, procedures and regulatory obligations as well as the Standard Interconnection Agreement.

The general offering does not address specific contract issues within a CLEC's Interconnection Agreement that may be different from the general offering. Where specific contract issues differ from the information provided here, the contract provisions will prevail for the term of the specific CLEC Interconnection Agreement. Otherwise, the general offering provisions will apply.

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## BellSouth Unbundled Copper Loop

### Acronyms

CDP	Clear Defective Pair
CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
CRSG	Complex Resale Support Group
DLC	Digital Loop Carrier
DLR	Design Layout Record
DSLAM	Digital Subscriber Line Access Multiplexer
ECD	Estimated Completion Date
EE	Enhanced Electronic
FOC	Firm Order Confirmation
FRN	Facility Reservation Number
ID	Identification
LCSC	Local Carrier Service Center
LMU	Loop Make-up
LSOGv2	Local Service Ordering Guidelines version 2
LSOGv4	Local Service Ordering Guidelines version 4
LSR	Local Service Request
LST	Line & Station Transfer
MDF	Main Distribution Frame
NC	Network Channel
NCI	Network Channel Interface
NID	Network Interface Device
OBF	Ordering & Billing Forum
OC	Order Coordination
OSPE	Outside Plant Engineering
PON	Purchase Order Number
RESID	Reservation Identification
RRD	Revised Resistance Design

# DRAFT

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## BellSouth Unbundled Copper Loop

### Acronyms (continued)

SC	Special Construction
SECNCI	Secondary Network Channel Interface
SI	Service Inquiry
TR73600	Technical Reference 73600
UCL-D	Unbundled Copper Loop-Designed
UCL/L	Unbundled Copper Loop/Long
UCL/S	Unbundled Copper Loop/Short
ULM	Unbundled Loop Modification
ULM-BT	Bridged Tap
ULM-FC	Load Coil
UNE	Unbundled Network Element
USOC	Universal Service Order Code



**Exhibit No. WGL - 4**



## **BellSouth Unbundled Copper Loop – Non-Designed**

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### **BellSouth Unbundled Copper Loop – Non-Designed (UCL-ND)**

#### **CLEC Information Package**

**Version 3**

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## **BellSouth Unbundled Copper Loop – Non-Designed**

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## **BellSouth Unbundled Copper Loop – Non-Designed**

### **REVISIONS:**

#### **Revisions – Version 3**

Page 7 – Service Capabilities - Options

Updated to add “Loop Testing” and “CLEC Service Order Tracking System” (CSOTS) information to package.

Page 10 – Ordering & Provisioning

Updated to add verbiage concerning mechanization.

Page 11 – Rate Elements and USOCS

Updated to add the Rate Elements and USOCS to table:

Page 15 – Acronyms

Added CSOTS and definition to list.

Updated all pages to reflect correct version, date and page numbers.

#### **Revisions – Version 2**

Updated to add REVISIONS page - Page 3

Page 9 - Service Order Requirements Section – Local Service Request (LSR) Form

Update table to add the information that the CLEC needs to populate on the LSR form if they are requesting Loop Testing.

Page 10 – Rate Elements & USOCs Section

Update table to add the new USOCs associated with Loop Testing.

## **BellSouth Unbundled Copper Loop – Non-Designed**

### **Introduction & Scope**

This Product Information Package is intended to provide to CLECs a product description and general ordering information specific to the UNE described herein. Detailed ordering guidelines are provided in documents on the BellSouth Interconnection web site.

The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the Carrier Notification Process.

Please contact your BellSouth Account Manager if you have any questions about the information contained herein.

## BellSouth Unbundled Copper Loop – Non-Designed

### Service Description

Unbundled Copper Loop – Non-Designed (UCL-ND) will be provisioned as a dedicated 2- wire metallic transmission facility from BellSouth's Main Distribution Frame (MDF) to a customer's premises (including the NID).

UCL-ND will be a “**dry copper**” facility in that it will not have any intervening equipment such as load coils, repeaters, or Digital Access Main Lines (“DAMLs”). The UCL-ND loop may contain bridge tap of up to 6 Kft (exclusive of the loop length between the end user's premises and Serving Wire Center (SWC). UCL-ND typically will be 1300 Ohms resistance and in most cases will not exceed 18 Kft (18,000) feet in length, although UCL-ND will not have a specific length limitation. For loops less than 18 Kft and with less than 1300 Ohms resistance, the loop will provide a voice grade transmission channel suitable for loop start signaling and the transport of analog voice grade signals. UCL-ND will not be designed and will not be provisioned with either a Design Layout Record (DLR) or a test point.

If no compatible BellSouth facilities are available, the CLEC may utilize BellSouth's existing electronic Unbundled Loop Make-Up (LMU) process to screen and reserve facilities. If the CLEC uses the above process, they must provide the RESID/FRN information in the REMARKS section of the paper LSR (Local Service Request) form.

The CLEC may use BellSouth's Unbundled Loop Modification (ULM) process to remove bridge tap and or load coils from copper facilities in order to condition them as UCL-ND loops. Therefore, some loops that would not qualify as UCL-ND could be transformed into loops that do qualify by using the ULM process. The CLEC would send a request for the UCL-ND loop and any ULM requests, business as usual. These loops are not intended to support any particular services and may be utilized by the CLEC to provide a wide range of telecommunications services so long as these services comply with industry standards and do not adversely affect BellSouth's network.

CLEC may request, for an additional non-recurring charge, an Engineering Information (EI) document from BellSouth, which provides loop make up information, similar to a Design Lay Out Record (DLR). The CLEC must have the UCL-ND and EI in their CLEC contract, before they submit an order for these items. If not in the CLEC contract, the CLEC must contact their BellSouth negotiator to amend their contract.

## **BellSouth Unbundled Copper Loop – Non-Designed**

### **Service Capabilities**

UCL-ND will be terminated at the Central Office (CO) in the following manner:

1. They will be delivered to the CLEC at their collocation space via a cross - connect. This cross-connect element will be provisioned out of the Collocation offering. Once this connection is made, the CLEC will provide the equipment and/or transport needed to provide the desired service to their end user.
2. If either of these loops is already connected to another UNE (Unbundled Network Element) (e.g., interoffice transport, unbundled local switching, etc.) they may remain connected to that element if the CLEC orders a combined UNE that includes the UCL-ND. BellSouth will not combine UCL-ND with any other UNE if the UCL-ND is not already combined with that element.

Once the service order has been processed via the (Local Carrier Service Center) LCSC Service Rep or via Electronic Interface, the service order will flow to Address and Facility Inventory Group (AFIG) for verification of CLEC CA/PR and to assign BellSouth facilities for CKL 2 location. Service order will flow to CO to be wired, then to Work Maintenance Center (WMC) for a possible dispatch to the field. Service order is then routed to the UNE CWIN (Customer Wholesale Interconnection Network Services) Center for coordination and turn up of service.

If facilities are not available, the CLEC may elect to pay Special Construction charges if they wanted BST to place facilities to a location where they do not currently exist. There will be instances where UCL-ND will not be available, (i.e., in an all fiber area.)

## **BellSouth Unbundled Copper Loop – Non-Designed Service Capabilities – Continued**

### **Options**

BellSouth offers three options to assist the CLEC in converting existing end-users to its service. These options are described below:

1. BellSouth offers Order Coordination (OC) as a chargeable option per UCL-ND loop when reuse of existing facilities has been requested by the CLEC. The purpose of OC is to convert an existing facility to the CLEC's service in a manner that minimizes dial-tone interruption for the end user.
2. BellSouth also offers Order Coordination-Time Specific (OC-TS) conversions when the CLEC has ordered OC and requires a time specific order conversion. In addition to the OC charge, which is applied per loop, an OC-TS charge will be applied per UCL-ND order.
3. A CLEC may also order an EI Document that provides loop information similar to information provided on a DLR for an SL2 loop.
4. CLEC may request "Loop Testing" as a billable option by making the following note in the REMARKS section of the LSR: **Loop Testing Requested.**

"Loop Testing" for UNE Non-Design products is defined as testing consistent with Plain Old Telephone Service (POTS) type services.

5. CLEC Service Order Tracking System (CSOTS)

On UCL-ND loops if the CLEC has not requested "Loop Testing" or "Order Coordination" then the CLEC will check the CLEC Service Order Tracking System (CSOTS), which is posted to the WEB on Due Date + 1 day to check on status of the loop. BellSouth Technician/UNE CWINS Center **will not notify the CLEC.**

**CSOTS WEB address is: <https://clecview.bellsouth.com>**

## **BellSouth Unbundled Copper Loop – Non-Designed Technical Requirements**

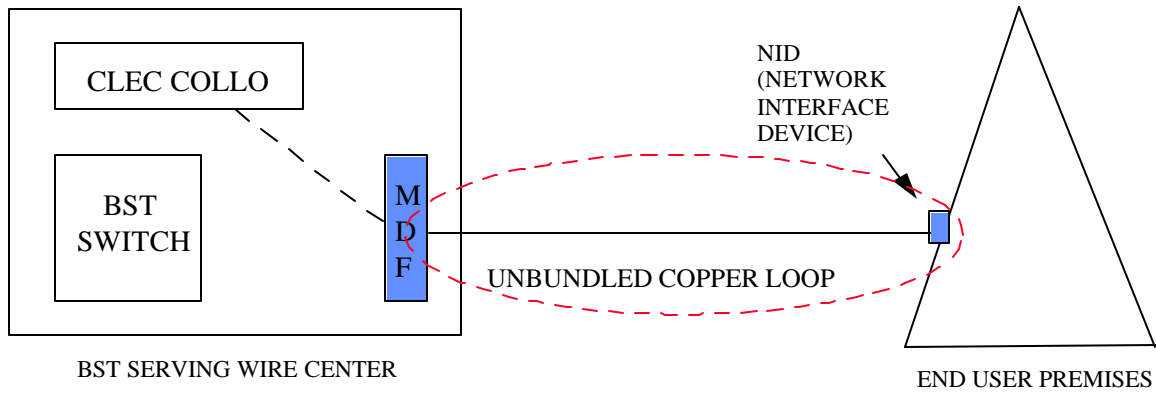
UCL-ND will be delivered to the CLEC at their collocation space via a cross- connect. Once this connection is made, the CLEC will provide connectivity needed to take the circuit back to its switch. .

UCL-ND will be provisioned as 2 Wire circuits and will meet technical specifications as described in [BellSouth's TR73600](#).



## BellSouth Unbundled Copper Loop – Non-Designed

### *Network Configuration*



## BellSouth Unbundled Copper Loop – Non-Designed Ordering & Provisioning

The Local Carrier Service Center (LCSC) will receive and process orders by submission of the Local Service Request (LSR) from the CLEC. CLECs will utilize mechanized entry system **when** available.

### Service Order Requirements

#### Local Service Request (LSR) Form

The CLEC will complete a Local Service Request (LSR) form according to the [BellSouth Business Rules for Local Ordering – TCIF 9/LSOG 4](#) or the [LEO IG \(Volume 1\) - TCIF 7](#). The following information is unique to UCL-ND and is also required on the LSR:

LSR Field	Information Required
NC 2 Wire UCL-ND	LXT-
DRC	LMU (Populated when the CLEC is requesting an Engineering Information (EI) Document from BellSouth)
REMARKS	If CLEC is requesting Loop Testing, they would add the following information: <b>REQUEST LOOP TESTING</b>

The following forms are applicable to this product:

Local Service Request form	LSR
End User Information form	EU
Loop Service with Interim Number Portability	LS-INP
Loop Service	LS

The CLEC may send the paper LSR package via fax servers, courier service or U.S. Mail.

The LSR request may be submitted by the CLEC via mechanization, **when available**.

## **BellSouth Unbundled Copper Loop – Non-Designed Rate Elements & USOCs**

Rates for UCL-ND loops will need to be included in your contract. Rates may be interim and subject to true-up pending approval of final rates by the respective State Commissions. Commission orders will specify the dates back to which true-ups are applicable. Below are the rate elements for UCD-ND:

<b>Rate Element</b>	<b>USOC</b>
Physical, Expanded Interconnection Service, 2 Wire Cross-Connect, Loop, Provisioning	PE1P2
Unbundled Voice Loop, Cross – Connect, 2 Wire Loop, Provisioning	UEAC2
Unbundled Copper Loop Non-Designed, Non-Loaded, 2 Wire	UEQ2X
Unbundled Sub-Loops, Manual Order Coordination Charge	USBMC
Unbundled Miscellaneous Rate Element, Loop Testing, Basic Time, Normally Scheduled Working Hours, 1 <sup>st</sup> Half Hour or Fraction Thereof	URET1
Unbundled Miscellaneous Rate Element, Loop Testing, Basic Time, Normally Scheduled Working Hours, Each Additional Half Hour or Fraction Thereof	URETA
Unbundled Contact Name, Provisioning Only, Zero Rated, Design Affecting, Non-Terminating	UNECN
Service Order Charge for CLECS, Manual Service Order Charge	SOMAN
Service Order Charge for CLECS, Mechanized	SOMECH

## **BellSouth Unbundled Copper Loop – Non-Designed Other Non-Recurring Charges**

*Expedite Charges* – Applies if CLEC requests order interval less than the stated “standard interval” in the [BellSouth Products and Services Interval Guide](#) .

*Manual Service Order* – Applies if order is manually submitted and electronic ordering is available.

*Order Cancellation* – Applies if the CLEC cancels an order after the FOC (Firm Order Confirmation) has been issued.

*Service Order Modification Charge* – Applies if the CLEC modifies a service order after the Firm Order Confirmation has been issued.

*Overtime Charge* – Applies for work requested outside of normal working hours. Normal working hours for provisioning work requests is between 9 a.m. and 4 p.m. local time.

*Time and Material* – Applies for CLEC requested dispatch, (outside the central office), if “no trouble found.”

## **BellSouth Unbundled Copper Loop – Non-Designed Intervals**

Refer to the [BellSouth Products and Services Interval Guide](#) for the 2 Wire UCL-ND standard intervals.

### **Maintenance & Repair**

The CLEC is responsible for testing and pre-screening any trouble conditions to ensure the trouble is with the UCL-ND loop before calling BellSouth. If the CLEC's testing isolates the repair problem to the UCL-ND loop, the CLEC should notify the CWINS (Customer Wholesale Interconnection Network Services) Center. CLEC will provide the results of the CLECs test, which would indicate a problem on the BellSouth provided loop.

The CLEC must provide the following information to CWINS when reporting a repair problem:

UCL-ND Circuit ID Number  
CLEC Ported Number (If Applicable)  
Service Address of UCL-SL1 Circuit in Trouble  
Description of Trouble  
Contact Name  
Contact Telephone Number

The UCL-ND is provisioned without a remote access test point, therefore, if a trouble is reported and no trouble is found, BellSouth will charge the CLEC for any dispatches and tests required to confirm the loop's working status.

BellSouth will perform these repair functions during normal hours (8 a.m. – 5 p.m. local time). If the CLEC requests that BellSouth repair a trouble after normal work hours, the CLEC will be billed the appropriate overtime charges.

## **BellSouth Unbundled Copper Loop – Non-Designed Contract Specific Provisions**

Before any UCL-ND compatible loop can be ordered, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for this loop. This agreement must be in effect for all states where the CLEC plans to order these unbundled loops.

The information contained herein applies to the UCL-ND general offering. The general offering is in accordance with BellSouth's policies, procedures and regulatory obligations as well as the standard BellSouth Interconnection Agreement.

The general offering does not address specific contract issues within a CLEC's Interconnection Agreement that may be different from the general offering. Where specific contract issues differ from the information provided here, the contract provisions will prevail for the term of the specific CLEC Interconnection Agreement. Otherwise, the general offering provisions will apply.

## **Acronyms**

## **BellSouth Unbundled Copper Loop – Non-Designed**

AFIG	Address and Facility Inventory Group
BST	BellSouth Telecommunications
CA/PR	Cable / Pair
CLEC	Competitive Local Exchange Carrier
CO	Central Office
CSOTS	CLEC Service Order Tracking System
CWINS	Customer Wholesale Interconnection Network Services
DLR	Design Layout Record
DRC	Design Routing Code
EI	Engineering Information
EU	End User
FOC	Firm Order Confirmation
LCSC	Local Carrier Service Center
LNP	Local Number Portability
LMU	Loop Make Up
LS	Loop Service
LS-LNP	Loop Service with Number Portability
LSR	Local Service Request
NC	Network Channel
NID	Network Interface Device

## **BellSouth Unbundled Copper Loop – Non-Designed Acronyms - Continued**

OC	Order Coordination
OC-TS	Order Coordination – Time Specific
SWC	Serving Wire Center
TR73600	Technical Reference 73600
UCL-ND	Unbundled Copper Loop – Non-Design
ULM	Unbundled Loop Modification
UNE	Unbundled Network Element
USOC	Universal Service Order Code
WMC	Work Management Center





**Exhibit No. WGL - 5**

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**BellSouth LMU**

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***BellSouth Loop Makeup (LMU)***

***CLEC  
Information Package***

*(Version 4, April 16, 2001)*

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**BellSouth LMU****Section 1: Introduction & Scope**

This Product Information Package is intended to provide to CLECs a product description and general ordering information specific to the general service offering described herein. Detailed ordering guidelines are provided in documents located on the BellSouth Interconnection Services Web site as specified.

Please contact your BellSouth Account Manager, if you have any questions about the information contained herein.

**Disclaimer Statement:** The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the CLEC Notification Process.

## BellSouth LMU

### Section 2: Version History / Control

Any future modifications, enhancements, and/or improvements that are made to this Loop Makeup (LMU) CLEC Information Package for BellSouth's LMU Service will be reflected accordingly in this section of the document.

Section	Date / Version	Description
Table of Contents (TOC)	07/28/00 – Version 1	Version 2 (V2) has TOC and entire information package reformatted to include section numbers
Version History / Control	07/28/00 – Version 1	This section was not required in the first posting release of this package. With V2, this section has been inserted as Section 2
"Submitting a Request for Manual Loop Makeup"	07/28/00 – Version 1	This section has been removed for the V2 posting and relocated to the "BellSouth Loop Makeup (LMU) CLEC Pre-Ordering and Ordering Guide for Manual Loop Makeup" web document
"Guidelines for Interfacing with the CRSG UNE Group"	07/28/00 – Version 1	This section has been removed for the V2 posting and relocated to the "BellSouth Loop Makeup (LMU) CLEC Pre-Ordering and Ordering Guide for Manual Loop Makeup" web document
"Loop Makeup Service Inquiry (Form)"	07/28/00 – Version 1	This form has been removed for the V2 posting and relocated to the "BellSouth Loop Makeup (LMU) CLEC Pre-Ordering and Ordering Guide for Manual Loop Makeup" web document
"Service Description"	07/28/00 - Version 1	With V2, the section name has been re-titled as "Loop Makeup Service Description"
Section 5: Ordering Information for LMUSI	09/15/00 - Version 2	Sec 5.1 includes updated information for specifying a cancellation on the Manual LMUSI form. The update reads: "CLEC would request a cancellation by checking the box on the Manual LMUSI form."
Section 5: Ordering Information for LMUSI	09/15/00 - Version 2	At the end of Sec 5.2, a paragraph has been inserted redirecting the viewer to the LMU PO&OG web document for detailed instructions on placing Manual LMU requests
Section 3.1: Service Description	10/23/00 - Version 3	In the 2 <sup>nd</sup> paragraph listing of various components for BellSouth's Loop Makeup Service, the following component was deleted for the time being: "... <i>disturbers in the same or adjacent binder groups;...</i> " (See 10/16/00 Carrier Notification for further details.)
Section 5.2: Manual Process	04/16/01 - Version 4	CRSG receives Manual LMUSI requests via email

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**BellSouth LMU**

Section 5.2: Manual Process	04/16/01 - Version 4	The standard service interval for the return of a response on Manual LMUSI requests has been reduced from 7 to 3 business days.
Section 5.2: Manual Process	04/16/01 - Version 4	The paragraph containing instruction on the use of the RESID/FRN has been removed. RESID/FRN are addressed more explicitly in the Pre-Ordering & Ordering Guide for Manual LMU
Section 5.2: Manual Process	04/16/01 - Version 4	"Date of Service Deployment" has been changed to "Service Availability"
Section 5.3: Mechanized Process	04/16/01 - Version 4	In addition to BellSouth's Pre-Ordering Business Rules, CLECs are notified that another document will be posted in April, 2001 to assist with ordering of Mechanized LMU
Section 5.3: Mechanized Process	04/16/01 - Version 4	"Date of Service Deployment" has been changed to "Service Availability"

## BellSouth LMU

### Section 3: Loop Makeup Service Description

#### Sec 3.1: Service Description

The **Loop Makeup (LMU) Service** described in this Information Package is for access to loop makeup information as a preordering function, *separate from* the placement of any UNE service order. *Loop Makeup Service Inquiries* (LMUSI) for preordering loop makeup are likewise unique from other preordering functions with associated services inquiries (SI).

BellSouth Interconnection Services will offer LMU to its CLEC customers in a manner that is consistent with the requirements of the FCC's Third Report and Order (99-238). This means that BellSouth will provide CLECs access to loop makeup information that consists of the composition of the loop material (copper/fiber); the existence, location and type of equipment on the loop, including but not limited to digital loop carrier or other remote concentration devices, feeder/distribution interfaces, bridge taps, load coils, pair-gain devices; the loop length; the wire gauge; and the electrical parameters of the loop. LMU can be requested using the following rate elements per LMUSI:

USOC	Rate Element
• UMKLW	Loop Makeup - Preordering Without Reservation, per working facility queried (MANUAL)
• UMKLW	Loop Makeup - Preordering Without Reservation, per spare facility queried (MANUAL) [Maximum No. of Spare Facilities per LMUSI is (3).]
• UMKLP	Loop Makeup - Preordering With Reservation, per spare facility queried (MANUAL) [Maximum No. of Spare Facilities per LMUSI is (3).]
• <i>tbd*</i>	Loop Makeup - Preordering Without Reservation, per working facility queried (MECHANIZED)
• <i>tbd*</i>	Loop Makeup - Preordering Without Reservation, per spare facility queried (MECHANIZED) [Maximum No. of Spare Facilities per LMUSI is (10).]
• <i>tbd*</i>	Loop Makeup - Preordering With Reservation, per spare facility queried (MECHANIZED) [Maximum No. of Spare Facilities per LMUSI is (10).]
<i>* tbd - USOC for LMUSI submitted via the appropriate electronic interface, to be determined</i>	

Reserved facilities for which the CLEC does not plan to place a UNE service order should be cancelled by the CLEC in a timely manner.

BellSouth's provision of loop data to the requesting CLEC on working facilities is contingent upon ownership considerations of the loop, whether by BellSouth or the requesting CLEC. CLEC is not authorized to receive loop data should loop be owned by an outside carrier.

Rates for all above elements will need to be included in your contract. Rates may be interim and subject to true-up pending approval of final rates by the respective State Commissions. Commission orders will specify the dates to which true-ups are applicable. *(Continued on next page)*



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## **BellSouth LMU**

The reservation holding timeframe is a maximum of four days from the time that BellSouth's loop makeup data is returned to the CLEC on the facilities queried. During this holding time that a Service Order is not placed, the reserved facilities are rendered unavailable to other customers, whether for CLEC(s) or for BellSouth.

### **Sec 3.2: Features and Benefits**

CLEC may use BellSouth's Loop Makeup (LMU) Service to determine if the loop queried is capable of supporting xDSL and other advanced data services, as applicable.

It is anticipated that LMU will be ordered most often by CLECs to determine whether or not modifications will be needed in order for the CLEC to provide advanced data services to an end user. The CLEC may request the loop makeup data per a manual or mechanized service inquiry, the Loop Makeup Service Inquiry (LMUSI), for either a working facility or for spare facilities, the number of which as specified in the Rate Element Table in the Service Description.

## **Section 4: Pre-Ordering Checklist**

### **Sec 4.1: Availability**

BST will offer this product in all states. Manual LMUSI will be submitted to BellSouth's Complex Resale Support Group (CRSG/ACCOUNT TEAM); Mechanized LMUSI will obtain loop data from BellSouth's Loop Facilities Assignment and Control System (LFACS). A CLEC's access to BellSouth's loop data, whether by mechanized or manual means, does not constitute a guarantee for the accuracy of such loop data. The information provided will be the information "as is" from BellSouth's hard copy records or BellSouth's databases.

### **Sec 4.2: Billing Information**

LMU will be billed from CABS. All activities herein described and associated with a unique USOC will incur a unique nonrecurring charge. The appropriate USOCs are still being assigned for the Mechanized LMUSI rate elements. Nevertheless, billing for all services rendered under LMU are applicable and shall be assessed to the CLEC.

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## BellSouth LMU

### Section 5: Ordering Information for LMUSI

#### Sec 5.1: Description of Ordering Process

CLECs may request BellSouth's loop makeup data through six LMUSI types as outlined above in the Rate Elements Table in the Service Description Section per rate element. Should the CLEC wish to cancel a reservation on spare facilities, the cancellation would require the address and the reservation ID(s) (RESID). CLEC would request a cancellation by checking the box on the Manual LMUSI form. *[The reservation ID is also known as a facilities reservation number (FRN). Hereafter within the verbal description of this Information Package, this code will be referred to as the "RESID/FRN".]*

#### Sec 5.2: Manual Process

The CLEC will provide the requested information on the Manual LMUSI form as applicable in order to process the LMUSI on either a working facility or on up to three spare facilities.

- The CLEC will email the Manual LMUSI form to BellSouth's Complex Resale Support Group (CRSG/ACCOUNT TEAM)
- Thereafter, BellSouth personnel from the CRSG/ACCOUNT TEAM will collect the necessary information from the appropriate BellSouth central office to obtain the requested loop data
- The CRSG/ACCOUNT TEAM forwards the updated LMUSI with the loop data to the CLEC. Please note that for inquiries on spare facilities involving a reservation, the LMUSI form will be returned to the CLEC with a unique RESID/FRN for each facility reserved

The **STANDARD SERVICE INTERVAL** for return of a Manual LMUSI is three business days.

For a working pair LMUSI, the end user's address will be required along with either the telephone number or the circuit ID (CKID). For a spare pair LMUSI placed manually, the address of the service location is the only required input.

**SERVICE AVAILABILITY (MANUAL):** *Contingent upon incorporating the necessary service provisions into one's Interconnection Agreement by amendment or new contract, CLECs may start submitting Manual LMUSI requests. Refer to the Section "Contract Specific Provisions".*

For more detailed instructions on submitting a request for Manual LMU, refer to the [BellSouth Loop Makeup \(LMU\) CLEC Pre-Ordering and Ordering Guide for Manual Loop Makeup](#). The Manual LMUSI form is located in this guide.

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## BellSouth LMU

### Sec 5.3: Mechanized Process

The CLEC will provide the information as prompted by the Operational Support System (OSS) interface for the LMUSI and as applicable to process the Service Inquiry on either a working facility or on up to ten spare facilities. Appropriate OSS interfaces for the mechanized process include LENS, TAG, and RoboTAG. Thereafter, the OSS interface submits the Mechanized LMUSI to LFACS for a response of loop makeup data. For instructions on preparing a Mechanized LMUSI, refer to [BellSouth's Pre-Ordering Business Rules](#). Please note that on April 26, 2001, BellSouth will also post BellSouth's D/CLEC Pre-Ordering & Ordering Guide for Electronic Loop Makeup (LMU) Guide, Version 1, on the BellSouth Interconnection Web Site in the Customer Guides Section.

The **STANDARD SERVICE INTERVAL** for a response to a Mechanized LMUSI is near real time.

For a working pair LMUSI, the end user's address will be required along with either the telephone number or the circuit ID. For a spare pair LMUSI placed mechanically, the required inputs are the address of the service location along with the "Network Channel/Network Channel Interface/Secondary Network Channel Interface" (NC/NCI/SECNCI) code. For further specifications on this code, refer to [BellSouth's Technical Reference TR73600](#).

Once the LMUSI has been initiated by the CLEC via the appropriate OSS interface, loop data will be obtained by means of BellSouth's Loop Facilities Assignment and Control System, formatted according to the configuration of the OSS interface utilized for the CLEC's LMUSI, and returned to the CLEC by such interface. Should the LMUSI requested by the CLEC include a reservation, the response communication to the CLEC will include a RESID/FRN for the entire set of facilities. Future releases of BellSouth's mechanized interfaces for LMU may entail unique RESID/FRNs for each facility reserved.

With the resulting loop data from the Mechanized LMUSI process, should the CLEC decide that it needs further loop data information in order to make a determination of loop qualification for its intended services, the CLEC may initiate a separate Manual LMUSI for a separate nonrecurring charge as identified by the associated USOC for that Manual LMUSI.

**SERVICE AVAILABILITY (MECHANIZED):** *Contingent upon incorporating the necessary service provisions into one's Interconnection Agreement by amendment or new contract, CLECs may start submitting Mechanized LMUSI requests. Refer to the Section "Contract Specific Provisions".*

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**BellSouth LMU****Section 6: Placing a UNE Service Order**

Once the CLEC has reserved single or multiple spare pairs, the CLEC may determine if it wishes to place an order for **BellSouth Unbundled Loop Modification** CLEC Information Package and/or for a UNE Service Order (e.g. for a 2-wire ADSL compatible loop). For such a UNE Service Order, refer to the **BellSouth Unbundled ADSL/HDSL Compatible Loops** CLEC Information Package.

BellSouth has provided this LMU service to allow the CLEC the opportunity and responsibility of determining the qualification for itself of BellSouth's loops for the specific services that the CLEC wishes to provide over certain loops. BellSouth further recognizes that the CLEC may choose to use equipment that it deems will enable it to provide a certain type and level of service over a particular BellSouth loop. However, such configurations may not match BellSouth's standards and specifications for the intended type and level of service. Accordingly, the CLEC bears full responsibility for being knowledgeable of BellSouth's standards and specifications of BellSouth's loops. The CLEC also bears full responsibility for making the appropriate ordering decisions of matching BellSouth loops with CLEC equipment that will accomplish the CLEC's end goal for the intended service it wishes to provide its end-user(s). The CLEC is responsible for any of its service configurations that may differ from BellSouth's technical standard of that service.

As part of BellSouth's ongoing management efforts of its network, BellSouth reserves the right to change out the originally assigned facility to a CLEC when it placed its UNE service order for another facility that matches the BellSouth technical standards of the loop ordered by the CLEC.

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**BellSouth LMU****Section 7: Contract Specific Provisions**

Before a Loop Makeup Service Inquiry (LMUSI) may be submitted by the CLEC, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for the LMUSI(s) being requested. This agreement must be in effect for all states where the CLEC plans to provide telecommunications services, as stipulated in the terms and conditions identifying those states wherein the CLEC is or seeks to become a certified alternative/competitive local exchange carrier for that state.

The information contained herein applies to the preordering LMU general service offering and is part of the standard BellSouth Interconnection Agreement. This general service offering is in accordance with BellSouth policies, procedures and regulatory obligations as well as the Standard Interconnection Agreement.

This general service offering does not address specific contract issues within a CLEC's Interconnection Agreement that may differ from this offering. Where specific contract issues differ from the information provided here, the contract provisions would prevail for the term of the contract.

**Exhibit No. WGL - 5a**

***Manual Loop Makeup (LMU)***  
***CLEC Pre-Ordering and Ordering Guide***  
***(Version 3, February 1, 2002)***

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## Manual Loop Makeup (LMU)

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## Manual Loop Makeup (LMU)

### Chapter 1.0: Introduction

#### 1.1 Purpose and Scope

This document provides the Competitive Local Exchange Carrier (CLEC) with the current Manual Loop Makeup (LMU) Pre-Ordering and Ordering guidelines pertaining to BellSouth *Manual* Loop Makeup (LMU). This document serves as a supplement to the CLEC Information Package (Version 3) of BellSouth Loop Makeup (LMU).

The BellSouth LMU CLEC Information Package (Version 3) is located at the BellSouth Interconnection Services Web site in the CLEC Products Section at:

<http://www.interconnection.bellsouth.com/guides/unedocs/bstlmua.pdf>

This Pre-Ordering and Ordering Guide is intended to provide the CLEC (Competitive Local Exchange Carrier) a facility description and general information specific to processing a request for the service offering described herein. This document is an original version in this format; an updated version in the old format.

For the remainder of this document, Manual Loop Makeup will be referred to as LMU. A detailed description of this facility offering will be provided in **Chapter 3.0, Overview**, beginning on Page 6 of this document.

Contact your appropriate Account Team representative if you have questions about the information contained herein.

#### 1.2 Disclaimer Statement

The information contained in this document is subject to change. BellSouth will provide notification of changes through the CLEC Notification Process.

This guide will be maintained until such time that its content is incorporated into the BellSouth Business Rules – Local Ordering (BBR-LO). The BBR-LO is found at:

<http://www.interconnection.bellsouth.com/guides/html/leo.html>

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## Manual Loop Makeup (LMU)

### Chapter 1.0: Introduction

#### 1.3 Version History / Control

Any future modifications, enhancements, and/or improvements that are made to this Pre-Ordering and Ordering Guide for BellSouth *Manual Loop Makeup (LMU)* will be reflected accordingly in this section of the document.

Section	Date / Issue	Description
ALL	09/14/00 – Issue 1.0 01/31/01 – Issue 1.1  01/31/01 – Issue 1.1	Initial Issue Release Notify CLEC of receipt of Manual LMU request. Ch. 5. Requirement that for queries on ported TN, CLEC must use CKID. Ch. 5.
All Highlighted Areas	03/12/01 – Updated Version 1.2	Updated Issue Release to correct web addresses within guide.
Throughout Entire Document	04/16/01 – Updated Version 1.3	LSR requirement with LMUSI dropped with new LMUSI. New LMUSI added and instructions updated. New information added on LMU content.
<i>NOTE: Changes Referenced Pertain to Consolidation of Request to a Single Form</i>  <i>Section Number with Subsection Title, as applicable, &amp; Specific "Item (Number)"</i>		
Section 5.1 "To Request Manual LMU", Items (1,5)	04/16/01 – Updated Version 1.3	Only the Manual LMUSI form is required
Section 5.1 "To Cancel Reservation", Item (2)	04/16/01 – Updated Version 1.3	LMUSI form only sent to SAC
Section 5.1 "To Cancel Pending LMUSI", Items (2)	04/16/01 – Updated Version 1.3	LMUSI form only sent to SAC

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## Manual Loop Makeup (LMU)

### Chapter 1.0: Introduction

Section	Date / Version	Description
Section 5.2	04/16/01 – Updated Version 1.3	Only the Manual LMUSI form is required; form must be typewritten
Section 5.3 "Part I: "General Information"	04/16/01 – Updated Version 1.3	Additional instructions provided on the "Negotiator" field
Section 5.3 " Part II: "Customer Information"	04/16/01 – Updated Version 1.3	Yes/No input required on spare pair requests
Section 5.4	04/16/01 – Updated Version 1.3	Entire content revised
All	07/10/2001 – Initial (in corrected format)	All – document converted to new format
Section 4.2		Added Basic Class of Service Information
Section 7.6		Escalation Contact Name changed
LMUSI Form		Addition to LMUSI concerning presence of Basic Class of Service Information
Highlighted Areas	08/06/2001 – Updated Version	Footer – Removed Proprietary Information Page 5 – Summary of updates being made in this version Page 12 – Corrected TN Page 13 and 18 – Corrections to Service Request Form
Highlighted areas throughout document – addition of Section 3.3 LOA Pre-Order Requirements	02/01/2002 – Updated Version release	Changes reflect Interconnection Realignment 2002 changes and the requirement for a LOA (Letter of Authorization)

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## Manual Loop Makeup (LMU)

### Chapter 2.0: Overview

BellSouth's provision of loop data to the requesting CLEC on facilities is contingent upon ownership considerations of the loop, whether by BellSouth or the requesting CLEC. The requesting CLEC is not authorized to receive loop data on a loop owned by another CLEC unless a Letter of Authorization (LOA) is received from the voice CLEC (owner) **or** it's authorized agent on the LMUSI (Loop Makeup Service Inquiry). The LOA should contain the Local Service Provider (LSP) Company Code (CC), date, and name.

Manual LMU of Spare Facilities may be requested **with** or **without** Reservation. When the CLEC requests Manual LMU of Spare Facilities **with** Reservation, a Reservation ID is returned with the LMU information, if facilities are available. The reservation ID is also known as a Facilities Reservation Number (FRN). Hereafter within this document, this code will be referred to as the "RESID/FRN".

The reservation holding timeframe is a maximum of four days from the time that BellSouth's loop makeup data is returned to the CLEC on the facilities queried. During this holding time that a Service Order is not placed, the reserved facilities are rendered unavailable to other customers, whether for CLEC(s) or for BellSouth. Reserved facilities for which the CLEC does not plan to place a UNE service order should be cancelled by the CLEC in a timely manner.

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## Manual Loop Makeup (LMU)

### Chapter 3.0: Pre-Ordering Guidelines

#### 3.1 Availability

BellSouth will offer this product in all states within the BellSouth Region.

Per Manual LMUSI request, the CLEC may inquire for Manual Loop Makeup information on a

- single working facility, or
- maximum of three spare facilities

The **STANDARD SERVICE INTERVAL** for return of a response to Manual LMUSI is three business days. This **STANDARD SERVICE INTERVAL** is a target interval. The interval is calculated from 'Receive Date' to 'LMU Return Date', and includes the time to render the Firm Order Confirmation (FOC). The FOC is rendered upon the issuance of the Billing Service Order. 'Receive Date' is defined as the date the Manual LMUSI is received by the designated BellSouth Account Team representative, and is counted as Day Zero. 'LMU Return Date' is defined as the date the LMU information is returned to the CLEC from BellSouth. The Interval calculation is reset to Zero when a CLEC initiated change occurs on the Manual LMU request.

#### 3.2 Contract Specific Provisions

Before a Loop Makeup Service Inquiry (LMUSI) may be submitted by the CLEC, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for the LMUSI(s) being requested. For more information on Contract Specific Provisions, refer to the [BellSouth LMU CLEC Information Package](#) located at:

<http://www.interconnection.bellsouth.com/products/html/unes.html>

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## Manual Loop Makeup (LMU)

### Chapter 3.0: Pre-Ordering Guidelines

#### 3.3 LOA Pre - Order Requirements

When the ordering CLEC does not **own** the voice loop of the end user account, the LOA information must include populating the three data fields associated with the LSP AUTH (Local Service Authorization Code). These three fields are **required** fields and include:

- Company Code
- Date formatted as month, day, and year (MMDDYYYY)
- Name of the CLEC owner authorizing the LOA

If any of the fields are blank or found to be incorrect, the Manual LMUSI form will be returned to the ordering CLEC indicating that LSP AUTH information is missing or incorrect. When the Loop belongs to BellSouth, this information is not required.

The LOA Process provides authorization for the DLEC LOA Partner to submit Loop Make UP (LMU) data request on behalf of the Voice CLEC LOA Partner. This process is associated with the Line Sharing and Line Splitting products.

The CLEC can obtain a copy of a LOA from the Collaborative Web Site shown below. An electronic signature from both parties must be included. The signed LOA will be provided to the BST web master via e-mail for posting. The web master will post a copy in each party's folder. The submitting party/parties will receive a confirmation from the web master that the LOA has been posted including the date of posting.

The entire LOA process document and the actual LOA form are located at the web address shown below:

[http://www.interconnection.bellsouth.com/markets/lec/line\\_sharing\\_collab/blsc\\_linesplitting\\_bls-ownsplit.html](http://www.interconnection.bellsouth.com/markets/lec/line_sharing_collab/blsc_linesplitting_bls-ownsplit.html)

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## **Manual Loop Makeup (LMU)**

### **Chapter 4.0: Ordering Guidelines**

#### **4.1 Order Process Flow**

The following points describe the high level Manual LMU Order Process Flow. Detailed information is presented within this Chapter in the Sections that follow.

##### **To Request Manual LMU:**

To request Manual LMU, the following procedures will be followed:

- The CLEC will request manual loop makeup information by submitting a Firm Order *Manual* Loop Makeup Service Inquiry (LMUSI) to the Complex Resale Support Group-UNE Group (CRSG).
- BellSouth will provide an acknowledgement to the CLEC upon receipt of a Manual LMU request from the CLEC.
- The CRSG submits the LMUSI to the geographically appropriate Service Advocacy Center (SAC).
- The SAC specialist prepares the LMU as specified on the LMUSI and returns the LMU, and the Facility Reservation (RESID/FRN), if requested and facilities are available, to the CRSG.
- The CRSG sends the LMUSI to the Local Carrier Service Center (LCSC) for Billing Service Order issuance and returns the LMU FOC and the RESID/FRN, if applicable, to the CLEC.
- The LCSC issues the Billing Service Order for the Manual LMU.
- The LCSC renders the Firm Order Confirmation (FOC) to the CRSG.
- The CRSG closes out the PON in BRITE.

##### **To Cancel Reservation(s):**

- To cancel a reservation on spare facilities, the CLEC submits the LMUSI form to the CRSG with the Cancel FRN item indicated.
- The CRSG sends the Cancel FRN LMUSI to the SAC.

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## Manual Loop Makeup (LMU)

### Chapter 4.0: Ordering Guidelines

#### To Cancel Pending LMUSI:

- To cancel a pending Manual LMUSI, for which no Loop Makeup information has been processed, the CLEC submits the LMUSI form to the CRSG with the Cancel LMUSI item indicated.
- The CRSG sends the Cancel LMUSI to the SAC.

#### **4.2 Submitting a Request to the CRSG**

For a *Manual* Loop Makeup request, the CLEC prepares and submits the Loop Makeup Service Inquiry (LMUSI) Form. The form must be type written. A copy of this form is shown beginning on Page 14 of this document.

The CLEC submits the LMUSI form via e mail to the CRSG for processing.

For a working pair LMUSI, the end user's address will be required along with either the telephone number or the circuit ID (CKID).

For spare facilities LMUSI, only the address of the service location is required.

The following guidelines should be followed when submitting requests to the CRSG UNE Group.

- In order to serve customers as efficiently as possible for manual requests, the CLEC should communicate with the CRSG UNE Group via email, whenever possible. New LMUSI orders should be submitted to the CRSG UNE mailbox. CLEC initiated corrections, and clarification responses should be submitted via email to the Network Service Engineer assigned to the account in the CRSG.
- The CRSG UNE Group email address is [crsg.une@bridge.bellsouth.com](mailto:crsg.une@bridge.bellsouth.com).
- When submitting the request via email, submit only 1 PON (LMUSI) per mail message.

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## Manual Loop Makeup (LMU)

### Chapter 4.0: Ordering Guidelines

- Use the following guidelines in formatting the email subject header.

Email Subject Header	Purpose
PON 12345 LMU NEW	For a new LMU order
PON 12345 CORRECTION	For a CLEC initiated correction or update
PON 12345 CLARIFICATION RESPONSE	For a clarification response
PON 12345 CANCEL	For a cancellation
PON 12345 STATUS	For a status request

***Every effort should be used to submit requests to the CRSG UNE Group via Internet Email. In cases of extreme circumstances when Internet Email is not available, contact the UNE Group Sales Support Manager.***

#### 4.3 CRSG Verification

The CRSG UNE Group will verify the following fields on the LMUSI:

- CLLI (Common Language Location Identifier) Code
- Address
- Number of spare pairs
- Billing information
- LOA information

If the owner of the voice account is **not** BellSouth, the UNE CRSG will verify that the LSP AUTH fields are populated including the CC, date (MMDDYYYY), and the individual name of the CLEC owner authorizing the LOA.

The CC field **must** match the AECN (Alternate Exchange Carrier Number) field on the end user CSR (Customer Service Record) to verify the CLEC owner of the voice facility.

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## **Manual Loop Makeup (LMU)**

### **Chapter 4.0: Ordering Guidelines**

#### **4.4 Reporting Status to the CLEC**

The CRSG UNE Group provides CLECs with the “Open PON Status Report” on a daily basis. The purpose of the report is to provide status of the PONs open in the CRSG for processing. A PON is considered closed in the CRSG once the PON has either been FOC'd or the PON has been Cancelled. Once a PON has been posted 'Closed', it will no longer appear on the Open PON Status Report.

The report is pulled once per day, BEFORE 8:30am CST, and sent via email to the designated recipient.

The report shows the following information:

- CLEC NAME
- DATE RECEIVED
- END USER NAME
- STATE
- TYPE OF SERVICE
- PON
- CLARIFICATION DATE – IN & OUT
- DATE OF SERVICE INQUIRY
- DATE SENT TO LCSC
- CANCELLATION, if applicable
- NOTES TO CLEC

#### **4.5 To Specify CLEC Recipient of Open PON Status Report**

To request a change to the Email Distribution List of the Open PON Status Report, send an Internet Email message to the CRSG System Designer assigned to the account.

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## **Manual Loop Makeup (LMU)**

### **Chapter 4.0: Ordering Guidelines**

The Email message header should read as follows:

CHANGE PON STATUS REPORT DISTRIBUTION LIST

#### **4.6 CRSG UNE Group Escalation Procedures**

The escalation procedures for the CRSG can be reviewed at the web address shown below:

[http://www.interconnection.bellsouth.com/centers/html/com\\_resale\\_ord\\_esca.html](http://www.interconnection.bellsouth.com/centers/html/com_resale_ord_esca.html)

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## Manual Loop Makeup (LMU)

### Chapter 5.0: Service Request Form (LMUSI)

Beginning below is a copy of the Service Request Form utilized when requesting Manual LMU. Beginning on Page 16 of this document the line-by-line instructions for completing the document are shown.

<b>Part I -- General Information:</b> (Page 2 is only required if CLEC is requesting more than one loop.)		Page 1 of 2
<b>Loop Makeup Service Inquiry</b>		
SI # (PON Num.) _____	Firm Order _____ Change _____ Cancel FRN _____ Cancel LMU SI _____	
Negotiator <b>CRSG UNE TEAM</b> <b>7721</b>	Negotiator Telephone Number <b>205-321-7789</b>	Negotiator FAX <b>205-321-</b>
<b>Part II -- Customer Information:</b>		
CLEC Name _____	CLEC Contact/Telephone number _____	
Local Serving Central Office (ACTL) _____	CLEC Email _____	
CLEC ACNA _____	CLEC "C" BAN _____ (N if no "C07" BAN for LMU exists)	
CLEC OCN (CC): _____	REQ TYPE: <b>AB</b>	TOS: <b>1BF</b> ACT: <b>N</b>
LSP AUTH = cc _____	LSP AUTH DATE _____	LSP AUTH NAME _____
Customer Billing Information: (Populate if "C07" BAN for LMU does not exist)		
<b>BILLNM</b>	<b>STATE</b>	
<b>STREET</b>	<b>ZIP CODE</b>	
<b>FLOOR</b>	<b>BILLCON</b>	
<b>ROOM</b>	<b>TEL NO</b>	
<b>Part III -- CLEC Request</b>		
(Choose <b>one</b> of the following three choices, CLEC to indicate loop makeup type required, by telephone number/CKID, spare at address/copper or spare at address/DLC)		
_____ Provide LMU at Telephone Number/CKID _____		
_____ Provide LMU at address listed below for spare copper pair. _____		
_____ Provide LMU at address listed below for spare DLC pair. _____		
Service Address _____		
<b>Part IV -- Outside Plant Engineering Makeup Data First Requested Pair:</b>		
Fill in Cable, pair and FRN if spares requested, Fill in FRN if reservation is requested.		
Cable F1: _____	Pair: _____	FRN: _____
Cable F2: _____	Pair: _____	
Cable F3: _____	Pair: _____	
Cable F4: _____	Pair: _____	
This is a loop makeup for facilities listed above for the telephone number or address indicated in Part III.		
_____		
_____		
_____		
_____		
_____		
<b>Part V -- Comments</b>		
_____		
_____		
_____		
Prepared by (Facility Engineer) _____ Telephone Number _____		
Return to Negotiator within 2 working days. Call negotiator if any delay is expected or incurred. Revised 03-28-01		
"The information contained herein is based upon BellSouth's records. This is the same information that BellSouth uses to determine loop compatibility for its own services. BellSouth cannot and does not warrant that the information contained herein is accurate in every case."		

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## Manual Loop Makeup (LMU)

### Chapter 5.0: Service Request Form (LMUSI)

Part I -- General Information: (Page 2 is only required if CLEC is requesting more than one loop.) Page 2 of 2  
Loop Makeup Service Inquiry

SI # (PON Num.) \_\_\_\_\_

Negotiator **CRSG UNE TEAM**

Negotiator Telephone Number **205-321-7789** Negotiator FAX **205-321-7721**

**Part IV (cont) -- Outside Plant Engineering Makeup Data Second Requested Pair:**

Fill in Cable, pair and FRN if spares requested, Fill in FRN if reservation is requested.

Cable F1: \_\_\_\_\_ Pair: \_\_\_\_\_ FRN: \_\_\_\_\_

Cable F2: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F3: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F4: \_\_\_\_\_ Pair: \_\_\_\_\_

This is a loop makeup for facilities listed above for the telephone number or address indicated in Part III.

**Part IV (cont) -- Outside Plant Engineering Makeup Data Third Requested Pair:**

Fill in Cable, pair and FRN if spares requested, Fill in FRN if reservation is requested.

Cable F1: \_\_\_\_\_ Pair: \_\_\_\_\_ FRN: \_\_\_\_\_

Cable F2: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F3: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F4: \_\_\_\_\_ Pair: \_\_\_\_\_

This is a loop makeup for facilities listed above for the telephone number or address indicated in Part III.

**Part IV (cont) -- Outside Plant Engineering Makeup Data Third Requested Pair:**

Fill in Cable, pair and FRN if spares requested, Fill in FRN if reservation is requested.

Cable F1: \_\_\_\_\_ Pair: \_\_\_\_\_ FRN: \_\_\_\_\_

Cable F2: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F3: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F4: \_\_\_\_\_ Pair: \_\_\_\_\_

This is a loop makeup for facilities listed above for the telephone number or address indicated in Part III.

**Part IV (cont) -- Outside Plant Engineering Makeup Data Third Requested Pair:**

Fill in Cable, pair and FRN if spares requested, Fill in FRN if reservation is requested.

Cable F1: \_\_\_\_\_ Pair: \_\_\_\_\_ FRN: \_\_\_\_\_

Cable F2: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F3: \_\_\_\_\_ Pair: \_\_\_\_\_

Cable F4: \_\_\_\_\_ Pair: \_\_\_\_\_

This is a loop makeup for facilities listed above for the telephone number or address indicated in Part III.

**Part V -- Comments**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Prepared by (Facility Engineer) \_\_\_\_\_ Telephone Number \_\_\_\_\_

Return to Negotiator within 2 working days. Call negotiator if any delay is expected or incurred. Revised 03-28-01

"The information contained herein is based upon BellSouth's records. This is the same information that BellSouth uses to determine loop compatibility for its own services. BellSouth cannot and does not warrant that the information contained herein is accurate in every case."

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## Manual Loop Makeup (LMU)

### Chapter 5.0: Service Request Form (LMUSI)

#### 5.1 Line-By-Line Instructions

Instructions for preparing the LMUSI Form follow. The instructions are organized by Section, by field.

The LMUSI is a two-page form. Page 2 is only required if LMU is being requested for more than one facility (loop). A maximum of three facilities may be requested for a single service address per LMUSI request.

*The form MUST be typewritten. Unless otherwise noted, there are no restrictions regarding length of fields or alpha/numeric makeup of required information.*

#### Part I: "General Information "

Field	Instruction
SI# (PON Number)	Enter the CLEC unique Purchase Order Number (PON). This entry always required.
Firm Order	Select for initial request
Cancel LMUSI	Select to cancel <b>pending</b> LMUSI for which LMU has not yet been processed
Cancel FRN	Select to cancel RESID/FRN for pair(s) previously reserved
Change	Select to update a pending Firm Order request
Negotiator	This area is pre-populated with " <b>CRSG UNE TEAM</b> "
Negotiator's Tel Number	This area is pre-populated with " <b>205 321-7789</b> " (working telephone number for the CRSG)
Negotiator's Fax	This area is pre-populated with " <b>205 321-7721</b> " (working fax number for the CRSG)

*continued on next page*

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## Manual Loop Makeup (LMU)

### Chapter 5.0: Service Request Form (LMUSI)

#### Part II: "Customer Information"

Field	Instruction
CLEC Name	Name of the CLEC (required)
CLEC Contact/Telephone Number	Name and telephone number of the contact at the CLEC (required)
Local Serving Central Office (ACTL)	Access Customer Terminal Location (Common Language Location Identifier – 11 characters) (required)
CLEC E-mail	E-mail address of CLEC
CLEC ACNA	Access Customer Name Abbreviation
CLEC "C07" BAN	"C07" Billing Account Number (N If "C07" BAN for LMU does not exist)
CLEC OCN (CC)	Operating Company Number (Company Code)
REQ TYPE	Request type will <b>always</b> be AB
TOS	Type of Service will <b>always</b> be 1B-
ACT	Activity type will <b>always</b> be N (new)
LSP AUTH CC	Company Code of CLEC granting authorization (4 Numerics)
LSP AUTH DATE	DDMMYYYY – Date Authorization was signed by the owner CLEC
LSP AUTH NAME	Name of authorizing CLEC representative

Customer Billing Information: Populate if "C07" BAN for LMU does not exist.

<b>BILLNM</b>	Billing Name	<b>STATE</b>	Billing State
<b>STREET</b>	Street Address	<b>ZIP CODE</b>	Zip Code
<b>FLOOR</b>	Floor (if applicable)	<b>BILLCON</b>	Contact name for billing
<b>ROOM</b>	Room or Suite (if applicable)	<b>TEL NO</b>	Contact Telephone Number

Page 2 of the form continues on the next page.

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## Manual Loop Makeup (LMU)

### Chapter 5.0: Service Request Form (LMUSI)

#### Part III: "CLEC Request"

**Request Options:** Select *Only One* of the Three Choices

1. Provide LMU at Telephone Number/CKID
2. Provide LMU at address listed below for spare copper pair (loop facility)
3. Provide LMU at address listed below for spare Digital Loop Carrier (DLC) pair

If Selected	Then Provide	
LMU for working facility	Telephone number or Circuit ID (CKID) and authorization is required for a voice CLEC owned facility including the LSP AUTH CC, LSP AUTH DATE, and LSP AUTH NAME	
LMU for spare copper pair	Number of spare pairs required – Maximum 3	Reserve Pair(s)? <b>Y (yes) / N (no)</b>
LMU for spare DLC pair	Number of spare DLC pairs required – Maximum 3	Reserve Pair(s)? <b>Y (yes)/ N (no)</b>
Service Address	Enter the Local Exchange Navigation System (LENS), Telecommunications Gateway (TAG), or RoboTAG™ validated Service Address. Include any dept/floor/suite/room/apartment number, as well as, the U.S. postal zip code. This entry always required.	

**NOTE On a Working Facility:** For request on ported TNs, CLECs must use CKID

**NOTE I Spare Facility(-ies):** CLECs cannot request a mixture of copper and DLC pairs on a single LMUSI spare facility request. CLEC should provide a Y/N response regarding its choice for a reservation of the facility queried.

#### Section: "Comments"

***This section is always required with*** Cancel FRN.

Enter the FRN and Cable/Pair information for the reservation being cancelled.

*continued on next page*



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## Manual Loop Makeup (LMU)

### Chapter 5.0: Service Request Form (LMUSI)

#### 5.2 LMUSI Response

Information presented on the LMUSI Response is as follows.

##### **Section: "Outside Plant Engineering/SAC Makeup Data (N<sup>th</sup>) Requested Pair"**

If the LMU was requested on a working Telephone Number/Circuit ID, Outside Plant Engineering (OSPE) will fill in the Cable and Pair numbers and list the loop makeup of that Cable and Pair facility.

If spare facilities were requested and are available, Outside Plant Engineering (OSPE) will fill in the Cable and Pair numbers, populate the FRN if a reservation was requested by the CLEC, and list the loop makeup of that Cable and Pair facility.

If spare facilities are not available, or if the number of pairs available is less than the number requested, OSPE will indicate in the **Comments** section no spare pairs are available or that only some of the pairs are available.

If the CLEC indicates that they want a makeup by address for spare **copper or DLC pairs**:

- The SAC will supply an LMU for up to three spare copper or DLC pairs at that address. (The CLEC will indicate the number requested up to three and will indicate if they want the pairs reserved.) If there are no spare pairs or if the number of pairs available is less than the number requested, the SAC will indicate in the "Comments" section that no spare pairs are available or that only some of the pairs are available. **If no spare pairs are available no LMU is returned.** The LMUs for the requested number of pairs will be detailed in sections labeled "Outside Plant Engineering Data First Requested Pair," "Outside Plant Engineering Data Second Requested Pair" and "Outside Plant Engineering Data Third Requested Pair." The later two are on page 2 of the LMUSI. The requested pairs will be reserved with unique FRNs. **The LMU process returns no specific loop types. The only consideration is that they be copper if copper is asked for and they must be spare.**

OSPE will return the completed LMUSI to the CRSG.

*continued on next page*

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## Manual Loop Makeup (LMU)

### Chapter 5.0: Service Request Form (LMUSI)

#### 5.3 LMU Content

Loop Makeup Data is defined as the physical characteristics of the loop facilities, starting at the BST central office (CO) listed in chronological order and ending at the serving distribution terminal. Loop makeup data will consist of cable gauge and length, bridged taps (BT), load coils (LC), presence of Digital Loop Carrier (DLC) and any other equipment that is part of the local loop facilities.

The loop makeup will be listed on the LMUSI in segments. Segments equate to f(n) cables starting at the CO or RT with the f(1) and ending at the end user location f(n). Each segment will be broken down by break points. Break points are cable gauge change locations, environment changes and bridged tap points. Bridged tap will include the distance offset where the bridged tap occurs from the beginning of the segment, as well as the gauge and length of the bridged tap. The type of load coils used, if any, will be indicated and the CO end section and load coil spacings will be indicated. Each load coil spacing should be entered, the maximum being 17. If the loop begins at a RT the Remote Location Address (RLA) and CLLI of the RT will be indicated. The origin of the segment will be shown and will indicate "CO" or "RT" where the cable originates at a CO or RT, or it will contain the address of the cross-box where the cable originates. The following is an example of a typical LMU returned with two segments, f(1) and f(2), including loading. Lengths should be shown in kilofeet to two decimal places.

An example of a loop makeup response is as follows:

Segment 1 (F1)

Load coil type= **H88** Load spacing= **5.9, 5.85** CO end section=**2.8**

Origin= **CO** RLA= RT CLLI=

#	Gauge	length	Environment	BT Offset
<b>1</b>	<b>24</b>	<b>13.75</b>	<b>U</b>	
<b>2</b>	<b>26</b>	<b>2.85</b>	<b>U</b>	
<b>3</b>	<b>26</b>	<b>1.0</b>	<b>B</b>	<b>16.6</b>

*continued on next page*

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**Manual Loop Makeup (LMU)****Chapter 5.0: Service Request Form (LMUSI)**

Segment 2 F(2)

Load coil type=    Load spacing=    CO end section=

Origin=f **3522 misty valley dr**

RLA=

RT CLLI=

#	Gauge	length	Environment	BT Offset
---	-------	--------	-------------	-----------

<b>1</b>	<b>26</b>	<b>1.09</b>	<b>B</b>	
----------	-----------	-------------	----------	--

<b>2</b>	<b>24</b>	<b>1.60</b>	<b>B</b>	
----------	-----------	-------------	----------	--

<b>3</b>	<b>24</b>	<b>0.60</b>	<b>B</b>	<b>2.69</b>
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(Build out capacitors will be shown on a separate line with the following information: BOC=(Capacitance), (offset) such as BOC=.01, 2.50, which indicates a build out at 2.5 kf from the beginning of the segment and the capacitance is .01 microfarads.)

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## Manual Loop Makeup (LMU)

### Chapter 6.0: USOCs

Manual Loop Makeup may be requested for either a working facility or for spare facilities. The USOCs (Universal Service Order Codes) associated with Manual LMU are as follows:

USOC	Rate Element
UMKLW	MANUAL Loop Makeup - Preordering <u>Without</u> Reservation, per working facility queried
UMKLW	MANUAL Loop Makeup - Preordering <u>Without</u> Reservation, per spare facility queried [Maximum No. of Spare Facilities per Manual LMUSI is (3)]
UMKLP	MANUAL Loop Makeup - Preordering <u>With</u> Reservation, per spare facility queried [Maximum No. of Spare Facilities per Manual LMUSI is (3)]

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## Manual Loop Makeup (LMU)

### Chapter 7.0: Billing Information

Manual LMU will be billed from the Carrier Access Billing System (CABS) on a 'C07' Billing Account Number (BAN) with a Basic Class of Service Code of UMK. If the CLEC does not have one, it should be requested at the time Manual LMU is ordered.

All activities herein described and associated with a unique USOC will incur a unique nonrecurring charge.

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## Manual Loop Makeup (LMU)

### Chapter 8.0: Acronyms

ACNA	Access Customer Name Abbreviation
ACTL	Access Customer Terminal Location
AECN	Alternate Exchange Carrier Number
BAN	Billing Account Number
BBR - LO	BellSouth Business Rules – Local Ordering
BST	BellSouth Telecommunications
BT	Bridged Tap
CABS	Carrier Access Billing System
CC	Company Code
CKID	Circuit Identification
CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
CO	Central Office
CRSG	Complex Resale Support Group
CSR	Customer Service Record
DLC	Digital Loop Carrier
FOC	Firm Order Confirmation
FRN	Facilities Reservation Number
ID	Identification
LC	Load Coil

*continued on next page*

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## Manual Loop Makeup (LMU)

### Chapter 8.0: Acronyms

LCSC	Local Carrier Service Center
LMU	Loop Makeup
LMUSI	Loop Makeup Service Inquiry
LOA	Letter of Authorization
LSP	Local Service Provider
LSP AUTH	Local Service Provider Authorization Code
OCN	Operating Customer Name
OSPE	Outside Plant Engineering
PON	Purchase Order Number
RESID	Reservation ID
RLA	Remote Location Address
SAC	Service Advocacy Center
TN	Telephone Number
UNE	Unbundled Network Element





**Exhibit No. WGL - 6**

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## BellSouth Unbundled DS1 Loop

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### *Unbundled DS1 Loop*

### **CLEC** **Information Package**

*(Version 1)*

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## BellSouth Unbundled DS1 Loop

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## **BellSouth Unbundled DS1 Loop**

### **Introduction & Scope**

This Product Information Package is intended to provide to CLECs a product description and general ordering information specific to the UNE described herein. Detailed ordering guidelines are provided in documents located on the BellSouth Interconnection Web site.

The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the CLEC Notification Process.

Please contact your BellSouth Account Manager, if you have any questions about the information contained herein.

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## BellSouth Unbundled DS1 Loop

### Service Description

The DS1 Loop is a 4-wire facility that is provisioned according to industry standards for DS1 or Primary Rate ISDN services. The Unbundled DS1 Loop enables full duplex 1.544 Mbps digital transmission and supports either Super Frame (SF) or Extended Super Frame (ESF) framing formats. The DS1 Loop facility will include any repeaters or other electronics to provide this loop type. It will also include 4 Wire DS1 Network Interface at the end-user's location for the purpose of connecting the loop to the end-user's inside wire.

### Service Capabilities

The DS1 Loop is a designed circuit and is provisioned with a test point. BellSouth will provide a Design Layout Record (DLR).

BellSouth will perform installation testing (other than switch-based) that is needed to ensure the loop meets the specifications of [BellSouth's Technical Reference 73600 \(TR73600\)](#).

BellSouth will perform order coordination (OC) activities associated with Number Portability and/or disconnect orders. OC is intended to convert an existing customer to a new local service provider using the DS1 Loop in a manner that minimizes the end-user's dial-tone interruption. BellSouth will notify the CLEC of the appropriate conversion time and will then perform the work within the negotiated interval.

If the CLEC requests work after normal working hours, overtime rates will apply for work outside of 8:00 a.m. to 5:00 p.m. local time.

If the CLEC's end user has existing service with BellSouth that utilizes a digital quality loop, and wants to change local service providers, BellSouth will attempt to reuse the end user's existing loop.

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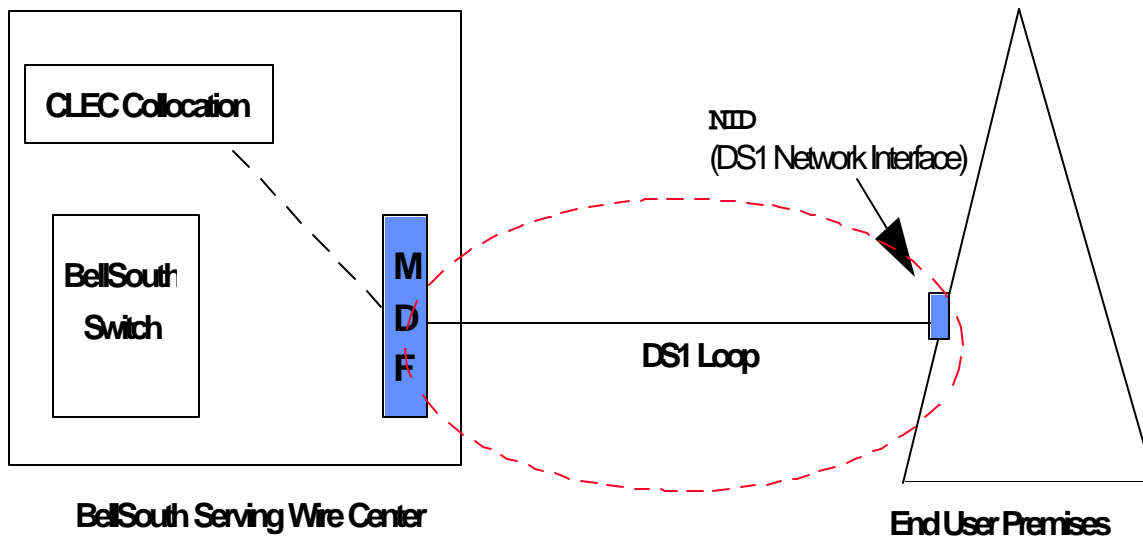
## BellSouth Unbundled DS1 Loop

### Technical Requirements

The DS1 Loop may be provisioned over a variety of loop transmission technologies including copper, HDSL-based technology or fiber optic transport systems. The technology used will be based upon existing capacities and distance from the central office.

The Unbundled DS1 Loop technical specifications are documented in [BellSouth's TR73600](#). CLEC's equipment and method of interconnection must meet the specifications documented in the technical reference.

### Network Configuration



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## BellSouth Unbundled DS1 Loop

### Ordering Information

Orders for the 4 Wire DS1 Loop can be placed electronically or manually. Information regarding electronic ordering and Local Service Request (LSR) form preparation can be found in the [Local Exchange Ordering-Implementation Guide](#) or the [BellSouth Business Rules for Local Ordering](#).

The following information that is unique to a 4 Wire DS1 Loop is also required on the LSR:

LSR Field	Information Required			
NC/NCI	Loop Type	NC	NCI* at CLEC	SEC NCI * at End User
	4 Wire DS1 – Alternate Mark Inversion/Super Frame (AMI/SF)	HC--	04QB9.11	04DU9.BN
	4 Wire DS1 – Alternate Mark Inversion/Extended Super Frame (AMI/ESF)	HCD--	04QB9.11	04DU9.1KN
	4 Wire DS1 – Binary Eight Zero Substitution/Super Frame (B8ZS/SF)	HCZ--	04QB9.11	04DU9.DN
	4 Wire DS1 – Binary Eight Zero Substitution/Extended Super Frame (B8ZS/ESF)	HCE--	04QB9.11	04DU9.1SN
CFA	Service Wire Center (SWC) Cable Facility Assignment (CFA) – (must provide 2 CFAs for 2 pairs)			

**\* Note:**

“0” is a numeric zero character

“O” is an alpha-numeric character

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## BellSouth Unbundled DS1 Loop

### Rate Elements & USOCs

Terms, conditions and rates for the 4 Wire DS1 Loop will need to be included in the CLEC's Interconnection Agreement before a 4 Wire DS1 Loop can be ordered. Rates may vary by state.

Rate Element	USOC
Unbundled 4 Wire DS1 Loop	USLXX
Cross Connect, 4 Wire Loop provisioning	PE1P1 or CNC1X

### Other Non-Recurring Charges

*Expedite Charge* – applies if CLEC requests an order interval less than the stated “standard interval” in the BellSouth Products and Services Interval Guide.

*Manual Service Order* -- applies if order is submitted manually

*Electronic Service Order* – applies if order is submitted electronically

*Order Cancellation* – applies if the CLEC cancels an order. This charge is for work associated with provisioning the 4 Wire DS1 Loop at the time the CLEC cancels an order.

*Service Order Modification Charge* – Applies if the CLEC modifies a service order after the Firm Order Confirmation has been issued.

*Overtime Charge* – Applies for work requested outside of normal working hours.

*Time & Material* – Applies for CLEC requested dispatch, (outside the central office) if “no trouble found”



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## BellSouth Unbundled DS1 Loop

### Intervals

Provisioning intervals for the 4 Wire DS1 Loop can be found in the [BellSouth Products and Services Interval Guide](#).

### Maintenance & Repair Procedures

The CLEC is responsible for testing and pre-screening any trouble conditions to make sure the trouble is with the 4 Wire DS1 Loop before calling BellSouth. If the CLEC's testing isolates the repair problem to BellSouth's unbundled loop, the CLEC should notify the Customer Wholesale Interconnection Network Services (CWINS) Center.

The CLEC must provide the following information to the CWINS Center when reporting a repair problem:

- 4 Wire DS1 Loop pair Circuit ID
- Description of the trouble

If BellSouth dispatches a technician on a CLEC reported trouble call and no 4 Wire DS1 Loop trouble is found, BellSouth will charge the CLEC for time spent on outside dispatch and for time spent testing the 4 Wire DS1 Loop.

### Contract Specific Provisions

Before the 4 Wire DS1 Loop can be ordered, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for each loop type that is being requested. This agreement must be in effect for all states where the CLEC plans to order these unbundled loops.

The information contained herein applies to the 4 Wire DS1 Loop general offering and is part of the standard BellSouth agreement. The general offering is in accordance with BellSouth policies, procedures and regulatory obligations as well as the Standard Interconnection Agreement.

The general offering does not address specific contract issues within a CLEC's Interconnection Agreement that may be different from the general offering. Where specific contract issues differ from the information provided here, the contract provisions will prevail for the term of the specific CLEC Interconnection Agreement. Otherwise, the general offering provisions will apply.

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## BellSouth Unbundled DS1 Loop

### Acronyms

CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
DLC	Digital Loop Carrier
DLR	Design Layout Record
EE	Enhanced Electronic
FOC	Firm Order Confirmation
ID	Identification
LCSC	Local Carrier Service Center
LSR	Local Service Request
MDF	Main Distribution Frame
NC	Network Channel
NCI	Network Channel Interface
NID	Network Interface Device
OC	Order Coordination
SECNCI	Secondary Network Channel Interface
TR73600	Technical Reference 73600
UNE	Unbundled Network Element
USOC	Universal Service Order Code



**Exhibit No. WGL - 7**

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## **BellSouth Unbundled Universal Digital Channel Loop**

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### ***Unbundled Universal Digital Channel (UDC) Loop***

#### ***CLEC Information Package***

*(Version 1)*

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## BellSouth Unbundled Universal Digital Channel Loop

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## **BellSouth Unbundled Universal Digital Channel Loop**

### **Introduction & Scope**

This Product Information Package is intended to provide to CLECs a product description and general ordering information specific to the UNE described herein. Detailed ordering guidelines are provided in documents located on the BellSouth Interconnection Web site.

The information contained in this document is subject to change. BellSouth will provide notification of changes to the document through the CLEC Notification Process.

Please contact your BellSouth Account Manager, if you have any questions about the information contained herein.

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## **BellSouth Unbundled Universal Digital Channel Loop**

### **Service Description**

The Unbundled Universal Digital Channel (UDC) Loop is a 2 Wire ISDN loop that is configured for data-only applications such as Integrated Digital Subscriber Line (IDSL) service. The UDC Loop is intended to support a CLEC's IDSL service but is not guaranteed to do so. The UDC Loop facility will include a Network Interface Device (NID) or equivalent demarcation point at the end-user's location for the purpose of connecting the loop to the end-user's inside wire.

### **Service Capabilities**

BellSouth will only provide the loop facilities with these offerings. BellSouth does not provide the Enhanced Electronics such as the Digital Subscriber Line Access Multiplexer (DSLAM) or any other service providing electronics with the UDC Loop.

The UDC Loop is a designed circuit and is provisioned with a test point. BellSouth will provide a Design Layout Record (DLR).

BellSouth will perform installation testing (other than switch-based) that is needed to ensure the loop meets the specifications of [BellSouth's Technical Reference 73600 \(TR73600\)](#).

BellSouth will perform order coordination (OC) activities associated with Number Portability and/or disconnect orders. OC is intended to convert an existing customer to a new local service provider using the UDC Loop in a manner that minimizes the end-user's dial-tone interruption. BellSouth will notify the CLEC of the appropriate conversion time and will then perform the work within the negotiated interval.

If the CLEC requests work after normal working hours, overtime rates will apply for work outside of 8:00 a.m. to 5:00 p.m. local time.

If the CLEC's end user has existing service with BellSouth that utilizes a digital quality loop, and wants to change local service providers, BellSouth will attempt to reuse the end user's existing loop.



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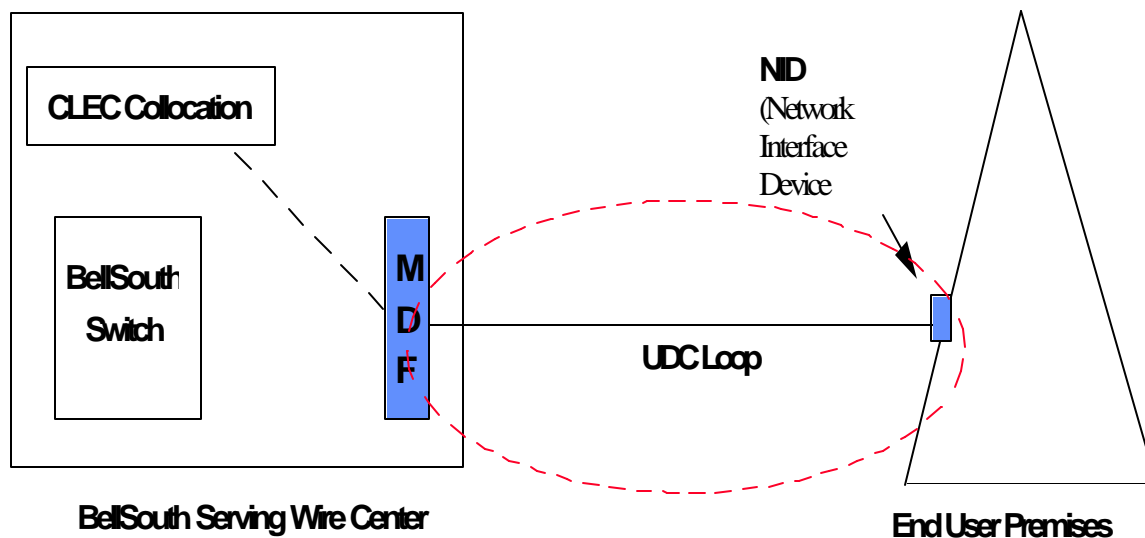
## BellSouth Unbundled Universal Digital Channel Loop

### Technical Requirements

The UDC Loop may be provisioned over copper facilities, Digital Loop Carrier (DLC) or both. If provisioned through a DLC system, BellSouth will ensure that the UDC Loop will be provisioned on compatible slots within certain DLC systems.

The UDC Loop has the same physical characteristics and transmission specifications as BellSouth's ISDN compatible loop. These specifications are documented in [BellSouth's TR73600](#).

### Network Configuration



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## BellSouth Unbundled Universal Digital Channel Loop

### Ordering Information

#### Local Service Request (LSR) form

The CLEC will complete a Local Service Request (LSR) form according to the [Local Exchange Ordering-Implementation Guide](#) or the [BellSouth Business Rules for Local Ordering](#). The LSR will be sent to the Local Carrier Service Center (LCSC).

Orders for UDC can only be placed manually at this time.

The following information that is unique to a UDC Loop is also required on the LSR:

LSR Field	Information Required			
	Loop Type	NC	NCI* at CLEC	SEC NCI * at End User
NC/NCI	2 Wire UDC	LXT-	02QC5.OOS	02IS5

**\* Note:**

“0” is a numeric zero character

“O” is an alpha-numeric character

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## BellSouth Unbundled Universal Digital Channel Loop

### Rate Elements & USOCs

UDC terms, conditions and rates will need to be included in the CLEC's Interconnection Agreement before UDC can be ordered. Rates may vary by state.

Rate Element	USOC
Unbundled Universal Digital Channel Loop, 2 Wire	UDC2X
Cross Connect, 2 Wire Loop provisioning	PE1P2 or UEAC2

### Other Non-Recurring Charges

*Expedite Charge* – applies if CLEC requests an order interval less than the stated “standard interval” in the BellSouth Products and Services Interval Guide.

*Manual Service Order* -- applies if order is submitted manually

*Electronic Service Order* – applies if order is submitted electronically

*Order Cancellation* – applies if the CLEC cancels an order. This charge is for work associated with provisioning the UDC Loop at the time the CLEC cancels an order.

*Service Order Modification Charge* – Applies if the CLEC modifies a service order after the Firm Order Confirmation has been issued.

*Overtime Charge* – Applies for work requested outside of normal working hours.

*Time & Material* – Applies for CLEC requested dispatch, (outside the central office) if “no trouble found”

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## **BellSouth Unbundled Universal Digital Channel Loop**

### **Intervals**

Provisioning intervals for the UDC Loop can be found in the [BellSouth Products and Services Interval Guide](#).

### **Maintenance & Repair Procedures**

The CLEC is responsible for testing and pre-screening any trouble conditions to make sure the trouble is with the UDC Loop before calling BellSouth. If the CLEC's testing isolates the repair problem to BellSouth's unbundled loop, the CLEC should notify the Customer Wholesale Interconnection Network Services (CWINS) Center.

The CLEC must provide the following information to the CWINS Center when reporting a repair problem:

- UDC Loop pair Circuit ID
- Description of the trouble

If BellSouth dispatches a technician on a CLEC reported trouble call and no UDC Loop trouble is found, BellSouth will charge the CLEC for time spent on outside dispatch and for time spent testing the UDC Loop.

### **Contract Specific Provisions**

Before the UDC Loop can be ordered, the CLEC must have an Interconnection Agreement that includes terms, conditions and rates for each loop type that is being requested. This agreement must be in effect for all states where the CLEC plans to order these unbundled loops.

The information contained herein applies to the UDC Loop general offering and is part of the standard BellSouth agreement. The general offering is in accordance with BellSouth policies, procedures and regulatory obligations as well as the Standard Interconnection Agreement.

The general offering does not address specific contract issues within a CLEC's Interconnection Agreement that may be different from the general offering. Where specific contract issues differ from the information provided here, the contract provisions will prevail for the term of the specific CLEC Interconnection Agreement. Otherwise, the general offering provisions will apply.

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## BellSouth Unbundled Universal Digital Channel Loop

### Acronyms

CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
DLC	Digital Loop Carrier
DLR	Design Layout Record
DSLAM	Digital Subscriber Line Access Multiplexer
EE	Enhanced Electronic
FOC	Firm Order Confirmation
ID	Identification
LCSC	Local Carrier Service Center
LSOGv2	Local Service Ordering Guidelines version 2
LSOGv4	Local Service Ordering Guidelines version 4
LSR	Local Service Request
MDF	Main Distribution Frame
NC	Network Channel
NCI	Network Channel Interface
NID	Network Interface Device
OBF	Ordering & Billing Forum
OC	Order Coordination
SECNCI	Secondary Network Channel Interface
SI	Service Inquiry
TR73600	Technical Reference 73600
UDC	Universal Digital Carrier
UNE	Unbundled Network Element
USOC	Universal Service Order Code



